An Epidemiologic Profile of Women and Children with HIV/AIDS in California

Prepared by:

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http://www.dhs.ca.gov/AIDS
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Feedback

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Executive Summary

HIV/AIDS Among Children

- AIDS affects children of color disproportionately, both in total number and in proportion of the population at risk (rate per population). Latino/a children had the highest number of cases reported since 1988 (174); African American children had both a high number of cases reported (154) and the highest rate of pediatric AIDS (3.06 cases per 100,000 population per year, 1988-97).

- Children most often (79.6%) contracted HIV, the virus that causes AIDS, from their mother during pregnancy or during the birth process. Injection drug use was a factor in the mother's mode of exposure to HIV 53.6% of the time, either through her own use of injection drugs, or through heterosexual contact with an injection drug user.

- Although the number of children diagnosed with AIDS each year has declined since 1991, the number of children living with AIDS continues to increase. It was estimated that 210 children in California were living with AIDS on January 1, 1998.

HIV/AIDS Among Women of Childbearing Age

- An adjusted total of 5,434 AIDS cases among women ages 13 to 45 were diagnosed from 1988 through 1997 in California. Cases were primarily African Americans (36.9%), Whites (36.2%), and Latinas (23.6%). The incidence rate among African Americans was distinctly higher compared with other racial/ethnic groups during the entire study period.

- Heterosexual contact and injection drug use were the predominant modes of exposure.

- 6% of HIV infected women accessing California State-Funded HIV Testing Sites (SFHTS) from July 1, 1995 to June 30, 1997 were pregnant. Pregnant women who were repeat testers had almost twice the HIV infection rate of first-time testers.

- African American women accessing SFHTS had the highest number and percentage of HIV infections compared to White and Hispanic women.

- African American women accessing SFHTS had the highest number and percentage of injection drug use and being the partner of someone who has multiple partners compared to Latina and White women. White women reported a higher percentage of being heterosexual with multiple partners than Latina and African American women.

- In the AIDS Drug Assistance Program (ADAP) for the years 1996 and 1997, 2239 were women of childbearing age.

- Among 13-45 year old ADAP clients served in 1996 and 1997, females had lower annual income than males. Nearly three out of four childbearing age women had annual incomes less than $7,471 or less than 100% of the 1996 federal poverty level.

- In early 1996, only 74% of ADAP clients were receiving antiretroviral medications. By late 1997, 96% were on antiretroviral therapy. The proportion of clients receiving drugs for the treatment of opportunistic infections has steadily declined from 64% in early 1996 to 44% by late 1997.

- Of the 416 women diagnosed with either HIV or AIDS between the ages of 13 and 45 and served by the Case Management Program (CMP) from January 1, 1996 to December 31, 1997, 271 women (65%) reported having an income that fell below 300% of federal poverty level.

- Heterosexual contact with a person who has or is at increased risk for HIV was the most commonly reported mode of exposure in CMP data with 318 women diagnosed between ages 13 and 45 reporting this type of exposure. There were 114 women who reported injection drug use as a mode of exposure and 24 women with blood disorder, transfusion, tissue or perinatal exposure.

HIV/AIDS Among Women Aged 46 and Over

- An adjusted total of 1,272 AIDS cases among women aged 46 and over were diagnosed from 1988 through 1997 in California. Cases were primarily Whites (41.9%), African Americans (31.9%), and Latinas (21.0%). The incidence rate among African Americans was distinctly higher compared with other races/ethnicities during the entire study period.

- Although transfusion was the primary mode of exposure for women aged 46 and over with AIDS in early years, heterosexual contact and injection drug use became the predominant modes of exposure in recent years. The number of injection drug users in 1997 increased almost six-fold compared to 1988. The number of women reporting heterosexual exposure increased almost five-fold during the same period.

- The overall HIV infection rate among older women accessing SFHTS was 1.5% (n =638). This infection rate is three times higher than among California childbearing age women accessing SFHTS.

- White women accessing SFHTS had the highest number and percentage of HIV infections compared to African American and Hispanic women.

- Repeat testers reported injection drug use and being a heterosexual with multiple partners more than two times higher compared to first-time testers. Repeat testers also reported a higher percentage of being the partner of an injection drug user.

- The gender comparison of the racial/ethnic distribution of the 449 female ADAP clients aged 46 year and over served in 1996 and 1997 revealed that minority women are disproportionately over-represented compared to males.

- Among clients over 45 served in 1996 and 1997, females had lower annual income than males. Nearly two thirds of women over 45 had annual incomes less than $7,471 or less than 100% of the 1996 federal poverty level.

- In early 1996, only 72% of ADAP clients were receiving antiretroviral medications. By late 1997, 97% were on antiretroviral therapy. The proportion of clients receiving drugs for the treatment of opportunistic infections has steadily declined from 74% in early 1996 to 46% by late 1997.

- Of the78 women diagnosed with either HIV or AIDS aged 46 and over and served by the Case Management Program (CMP) from January 1, 1996 to December 31, 1997, 48 women (62%) reported having an income that fell below 300% of Federal Poverty Income Guidelines.

- Heterosexual contact with a person who has or is at increased risk for HIV was the most commonly reported mode of exposure in CMP data with 46 out of 78 women (59%) diagnosed at ages 46 and over reporting this type of exposure. There were 9 women who reported injection drug use as a mode of exposure and 24 women with blood disorder, transfusion, tissue or perinatal exposure.

Introduction

When the first five cases of *Pneumocystis carinii* pneumonia (PCP) appeared among young men in Los Angeles in early 1981, acquired immunodeficiency syndrome (AIDS), as it came to be known, was thought to be limited to men (1-2). By the end of 1982, cases were also identified among women, as well as infants born to women with AIDS or at risk for AIDS (3-5). One of the first recognized pediatric cases was of an infant in the San Francisco Bay area who acquired the infection through a blood transfusion (6). Now, almost two decades later, women and in particular women of color are the fastest growing population with AIDS in the United States as well as in California (7-14).

In 1994, AIDS was the third leading cause of death among all women aged 25-44, the leading cause of death among African American women and the fifth leading cause of death among White women in the nation (15).

As of January 1, 1998, a total of 7,367 AIDS cases among women, including 553 cases among children aged less than 13 years had been reported to the California AIDS case registry (14). These cases accounted for 7% of all reported cases in California and also accounted for 7% of the women and children cases in the United States (12).

In recent years, the epidemic has grown more rapidly in women than in men. Over the years 1990-1995, the steady increase in AIDS among women and the moderate decrease among men led to an increasing trend in the proportion of AIDS cases among women in California (16). The plausible range of the number of women living with HIV or AIDS on January 1,1996 was estimated at 9,300 to 12,900 in California (16). Over the years 1990 to 1995, HIV prevalence among childbearing women ranged between 4,983 and 5,220 (16).

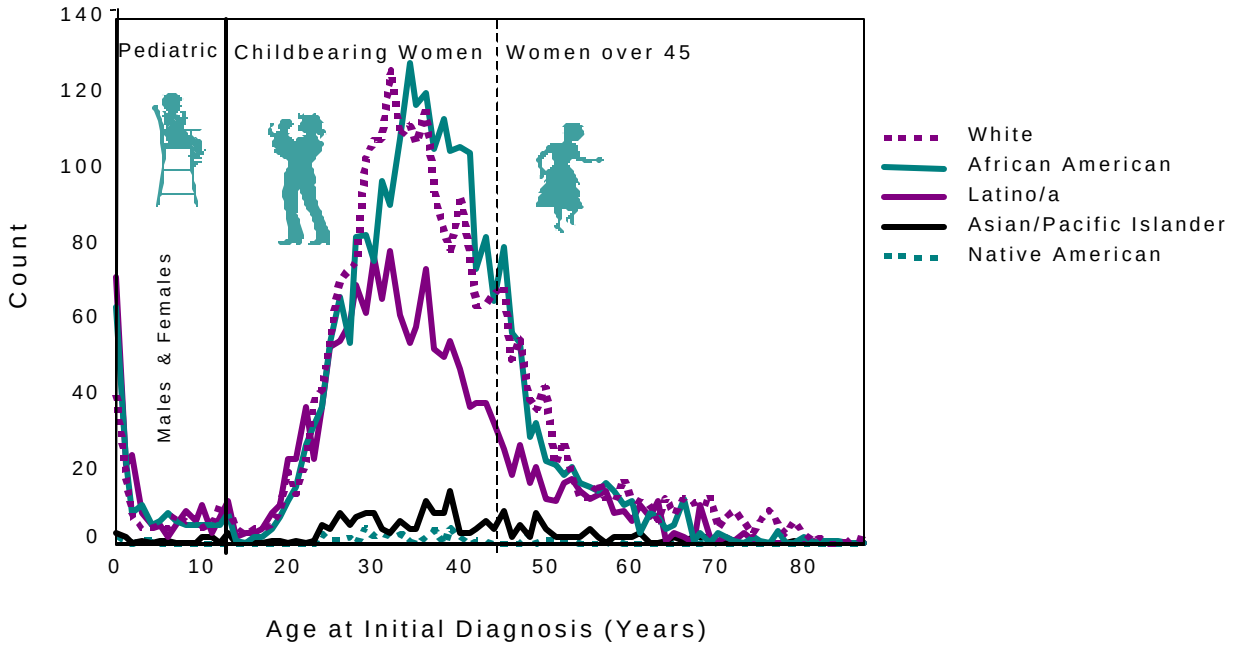
There is a disproportionate increase in the incidence of AIDS among women of color nationwide as well as in California (9,13). Nationwide, African American and Hispanic women make up only 17 percent of all women in the United States but represent 73 percent of all reported cases of AIDS (17). The AIDS incidence rate among African American women has been distinctly higher compared with other racial/ethnic groups throughout the epidemic in California. In 1995, the incidence rate among African Americans was 5.4 times higher than among Latinas, and 8.7 times higher than among Whites (13). HIV seroprevalence among California childbearing women showed significantly higher HIV infection rates among African Americans compared with women of other racial/ethnic groups (18, 19).

This report presents the status of HIV/AIDS among women and children in the State of California. The report is partitioned into three chapters devoted to children, women of childbearing age, and women ages 46 and over. In each of these chapters we present epidemiologic information based on several data sets including California AIDS surveillance, HIV Counseling and Testing in State-Funded Sites, AIDS Drug Assistance Program, and AIDS Case Management Program. The description of each data set is presented in the "Sources of Data" Section. To estimate incidence rates, we used the recent 1988-1996 county-, gender-, age-, and race/ethnicity-specific population estimates of the State of California provided by the Department of Finance (http://www.dof.ca.gov).

Figure 1 presents cumulative AIDS incidence data from 1988 to 1997 by race/ethnicity for children, women of childbearing age, and women ages 46 and over. Children are mostly diagnosed within a few months after birth and women of childbearing age in their thirties. After age 45, diagnosis declines with age but there are still many women being diagnosed with AIDS into their 50's and 60's. The highest numbers of cases are among African Americans, Whites, and Latinos/as. Graphs of incidence rates and more information regarding each of these sub-populations are provided in Chapters 1-3.

We hope that the findings will be useful in guiding public health officials and policy makers in their decisions regarding allocation of funds and resources to those women and children who are at high risk of contracting HIV or at high risk of morbidity and mortality due to HIV/AIDS.

Figure 1. AIDS Cases Diagnosed in Women and Children from 1988 to 1997 by Race/Ethnicity



Sources of Data

Data from the California AIDS Registry System

We used the data from the California AIDS Registry System to analyze AIDS cases among women and children diagnosed from 1988 through 1997 and reported to the AIDS case registry through June 1998. We adjusted the number of adolescent and adult cases upward to account for reporting delays (time between diagnosis of AIDS and report to the registry) (20).

Interpreting AIDS trends correctly requires understanding of the following factors:

On January 1993, the adolescent/adult AIDS case definition was expanded to include HIV positive persons with severe immunosuppresion ($CD4^+$ T-lymphocyte count of less than 200 cells/:L or a percent of total lymphocytes less than 14), pulmonary tuberculosis, recurrent pneumonia, or invasive cervical cancer (21). Because most HIV-infected persons become severely immunosuppressed before the onset of an AIDS opportunistic infection, and because retrospective reporting of cases under the expansion was allowed, the observed trends in AIDS incidence were temporarily distorted in 1992 and 1993.

In 1995 and 1996, the Food and Drug Administration approved four new drugs namely saquinavir, ritonavir, indinavir, and nelfinavir. (22) These drugs from the class of protease inhibitors interfere with the maturation and replication of HIV virus and are the most potent antiretroviral agents available to treat patients with HIV disease (23). Increasing effects of these drugs on the rate of HIV disease progression has made the interpretation of AIDS incidence trends more complicated in recent years.

A portion of AIDS cases initially are reported without risk information. The AIDS Case Registry staff routinely conduct epidemiologic investigations to reclassify these cases. As of June 30, 1998, 63% (2,044) of the cumulative no identified risk (NIRs) cases have been reclassified (Augustine Detres, California AIDS Case Registry, personal communication, 1998).

Data from the California State-Funded HIV Testing Sites

Counseling and HIV antibody testing in California has been funded by State general funds since 1985 to provide a means for high-risk persons to determine their HIV status. HIV tests are routinely offered with pre- and post-test counseling. Since 1994, standards and guidelines for counseling, testing, and referral have been revised to promote a client-centered model (24, 25). Specifically, each client receives an individual assessment of his or her risk for HIV based on a discussion of risk-related behaviors. As a result of this conversation, counselors help clients to develop specific strategies to reduce their risks of HIV and provided relevant health education information. In the course of these counseling sessions, counselors record 69 demographic and behavioral variables. Each site records these variables in a computerized database and submits the data monthly to the Office of AIDS for compilation and analysis. This data now represents a comprehensive self-reported behavioral definition of HIV risk available for clients who were tested.

In this analysis, we used July 1995 – June 1997 data from this database to characterize the target population who received counseling and testing services. In interpreting the results of the analysis, it is important to note that the HIV Counseling Information System contains one record for each reported HIV counseling and testing session with no identifying information to link the results of repeat tests to a specific individual over time. However,

counselors do ask clients how many prior HIV tests they have had, and the database is able to capture repeat tester rates and identify clients testing for the first time. While seroprevalence data are important in identifying the current number of HIV infected individuals, the primary purpose of HIV Counseling and Testing is to provide HIV testing and client centered counseling, which includes specific HIV risk reduction strategies, educational materials, and referrals.

Data from the AIDS Drug Assistance Program

The AIDS Drug Assistance Program (ADAP) was legislatively established in October 1987. The program provides access to HIV drugs for low- to moderate-income uninsured and underinsured individuals with HIV disease. Drugs provided by ADAP have been determined to improve and prolong the quality of life of HIV positive individuals, minimize the related occurrences of more serious illnesses, reduce more costly treatments and maximize the vitality and productivity of persons with HIV infection.

To be eligible, HIV-infected California residents must be 18 and over, have a federally adjusted annual gross income less than $50,000, and have a valid prescription from a California licensed physician. Drug expenses of clients whose incomes fall below 400% of the federal poverty level are fully subsidized by the program.

From providing zidovudine and pentamidine as statutorily mandated, ADAP has expanded to include 53 drugs in its formulary in 1997 and 110 drugs in its formulary as of December 1998. Drugs are added to the formulary based on recommendations made by an advisory group of doctors, pharmacists and client advocates. Up to late 1995, nucleoside reverse transcriptase inhibitors, also known as nucleoside analogues, were the only drug class of antiretrovirals available in the market and through ADAP. In mid-1996, a new class of antiretrovirals called protease inhibitors were FDA-approved for HIV treatment and subsequently added to the ADAP formulary. The latest class of antiretrovirals called non-nucleoside reverse transcriptase inhibitors was added to the formulary in 1997. The current guidelines for antiretroviral therapy recommend combining drugs of different antiretroviral classes for maximal viral suppression. Of the 53 drugs on the formulary in 1997, 33 are indicated for the treatment of opportunistic infections among HIV-infected individuals.

In June 1997, the Office of AIDS contracted to centralize ADAP drug dispensing, reimbursement, and data collection. The centralization allows the availability of more accurate and timely data to better monitor and project program utilization. It has also increased client access to pharmacy services.

In this report, both client and prescription data were aggregated and analyzed for the calendar years 1996 and 1997. There were several limitations one should consider in interpreting the results of the analysis. First, standard client unique identifier reporting was not completely adopted by all health jurisdictions until 1997. This may cause some clients to have more than one unique identifier and therefore counted more than once for any given time period prior to 1997. Most of the client information is self-reported, and reporting bias may occur when determining income and third party payor coverage to ensure the client's eligibility in the program. Note that a large proportion of clients have an undetermined third party payor.

Prescription information was accounted by the month it was reported and not the actual dates the prescriptions were received by the client. A pharmacy that overlooked reporting prescriptions filled for a given month may have reported it at a later date.

Data from the California AIDS Case Management Program

The AIDS Case Management Program (CMP) was established to provide cost-effective services for persons with AIDS or symptomatic HIV infection who are unable to function independently. CMP provides services to patients at their residence to avoid the need for more costly institutional care such as nursing facilities or hospitals. There are currently 42 projects under the Case Management Program serving people living with AIDS or HIV in 53 counties in California. The Office of AIDS contracts with local health departments and community-based organizations to administer the program throughout California. In this report, we used the information regarding clients served by CMP between January 1, 1996 and December 31, 1997 to characterize the population that receives case management services. A portion of this population was enrolled in the program prior to January 1996 and the rest were enrolled at some point during the two-year study period.

Data from the Survey of Childbearing Women

From 1988 through 1995, the California Department of Health Services, Office of AIDS, in collaboration with the Genetic Disease Branch and Viral and Rickettsial Disease Laboratory conducted the Survey of Childbearing Women in California to estimate the prevalence of HIV infection among childbearing women. This survey was sponsored by the Centers for Disease Control and Prevention and the National Institute of Child Health and Human Development. The data presented in this report are extracted from the report entitled "California HIV Seroprevalence Annual Report 1995" prepared by Donna Zukowski and Juan Ruiz, M.D., Dr.P.H.

Data from the Pediatric Spectrum of Disease Project

The Pediatric Spectrum of Disease (PSD) Project began in 1982 at the University of California, Los Angeles Medical Center, and in 1989 at the University of California, San Diego Medical Center, and Stanford University Medical Center. This project monitors children who are identified as HIV positive or exposed to HIV perinatally. The children's clinical progress is noted from the verification of HIV infection, through the development of symptomatic HIV disease and/or AIDS. In 1998 data collection for the project was centralized at the Stanford University site. Los Angeles County receives separate funding for PSD and collects data on their own residents.

HIV/AIDS Among Children

Data from the California AIDS Registry System

Pediatric AIDS Case Counts and Incidence

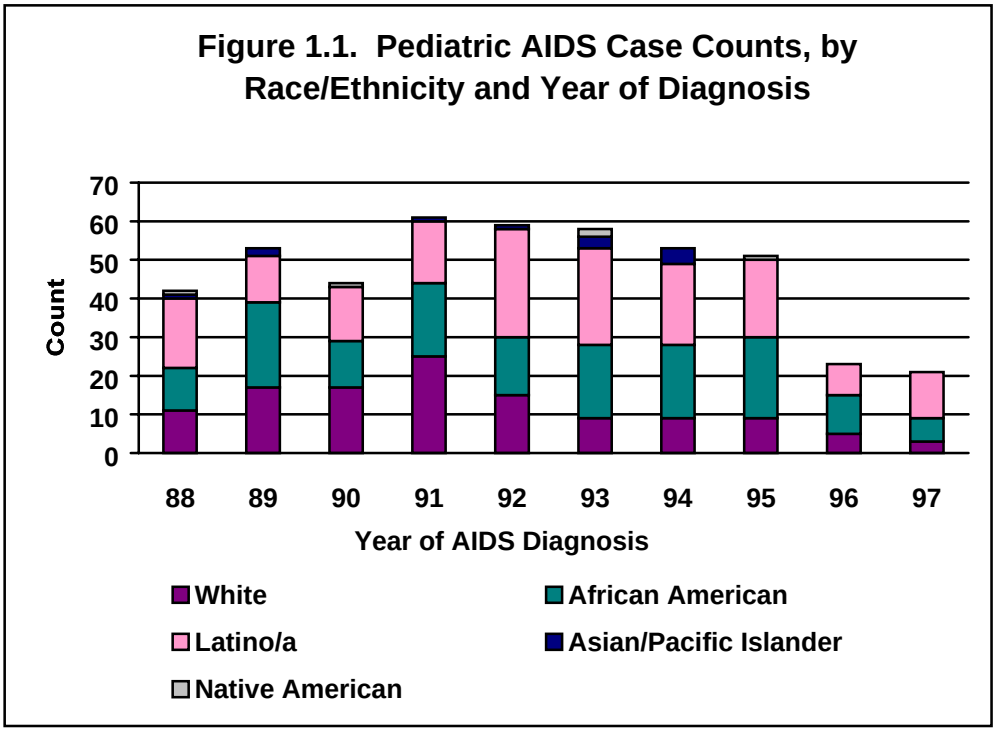
The number of children with AIDS peaked in 1991, when a total of 61 cases were diagnosed and subsequently reported. However, this peak was not the same across different racial/ethnic groups, as seen in Table 1.1 and Figure 1.1. In African American children the highest number of cases were diagnosed in 1989, with a second peak in 1995; among Latino/a children, the highest number of cases were diagnosed in 1992.

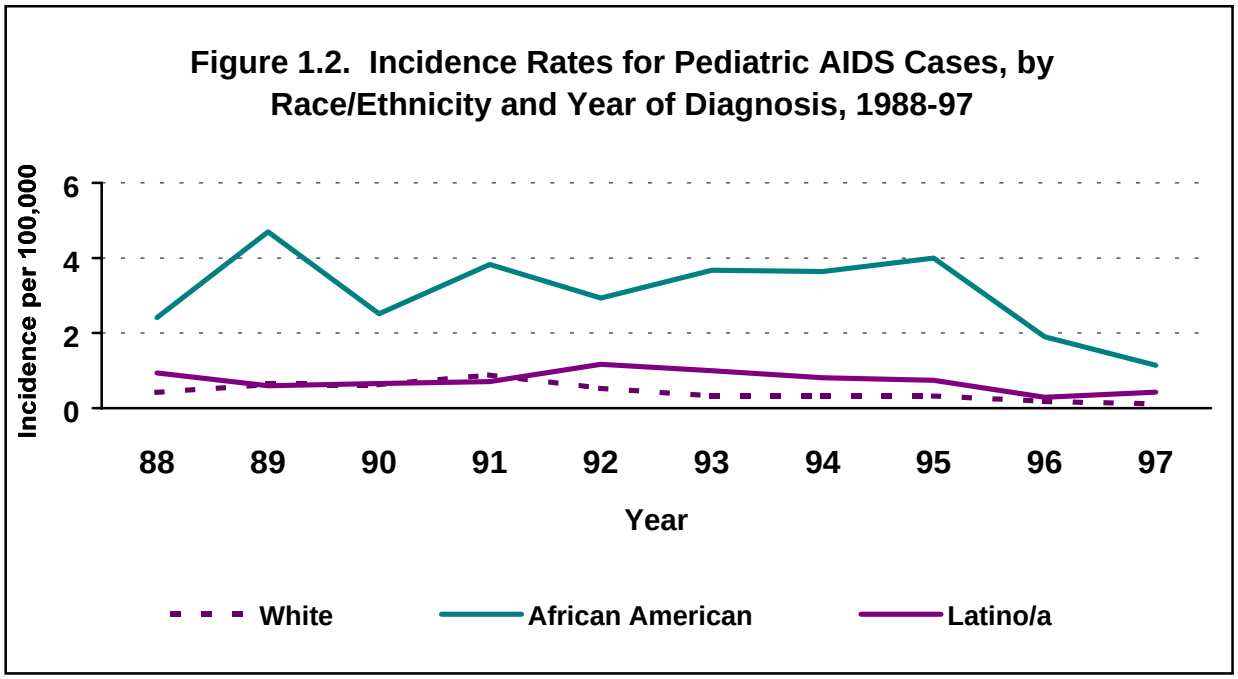
Table 1.1. Pediatric AIDS Cases, by Race/Ethnicity and Year of Diagnosis, California, 1988-1997.

Year	Patient Race/Ethnicity										**Total**
	White		African American		Latino/a		Asian/ Pacific Islander		Native American		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1988	11	26.2	11	26.2	18	42.8	1	2.4	1	2.4	42
1989	17	32.1	22	41.5	12	22.6	2	3.8	0	0.0	53
1990	17	38.6	12	27.3	14	31.8	0	0.0	1	2.3	44
1991	25	41.0	19	31.2	16	26.2	1	1.6	0	0.0	61
1992	15	25.4	15	25.4	28	47.5	1	1.7	0	0.0	59
1993	9	15.5	19	32.8	25	43.1	3	5.2	2	3.4	58
1994	9	16.7	19	35.2	21	38.9	4	7.4	0	0	54*
1995	9	17.6	21	41.2	20	39.2	0	0.0	1	2.0	51
1996	5	21.7	10	43.5	8	34.8	0	0.0	0	0.0	23
1997	3	14.3	6	28.6	12	57.1	0	0.0	0	0.0	21
Total	120	25.7	154	33.0	174	37.3	12	2.6	5	1.1	466

*1994 total includes one case with unknown race/ethnicity.

AIDS among children is almost evenly divided by gender; 48% of cases reported in the last decade were among females. The incidence rates by racial/ethnic group are illustrated in Figure 1.2. Although Latino children had the highest number of cases reported, the number of cases by population size was highest for African American children. The average incidence rate over this time period was 0.43 per 100,000 for Whites, 3.06 per 100,000 for African Americans, and 0.72 per 100,000 for Latinos.





Note. Incidence rates were not reported for Asian/Pacific Islanders and Native Americans as the annual number of cases was less than five.

Pediatric AIDS by California County

While pediatric AIDS cases are primarily found in urban areas, children living in rural areas have also been exposed to HIV and diagnosed with AIDS. Table 1.2 shows those counties in California that have reported pediatric AIDS cases.

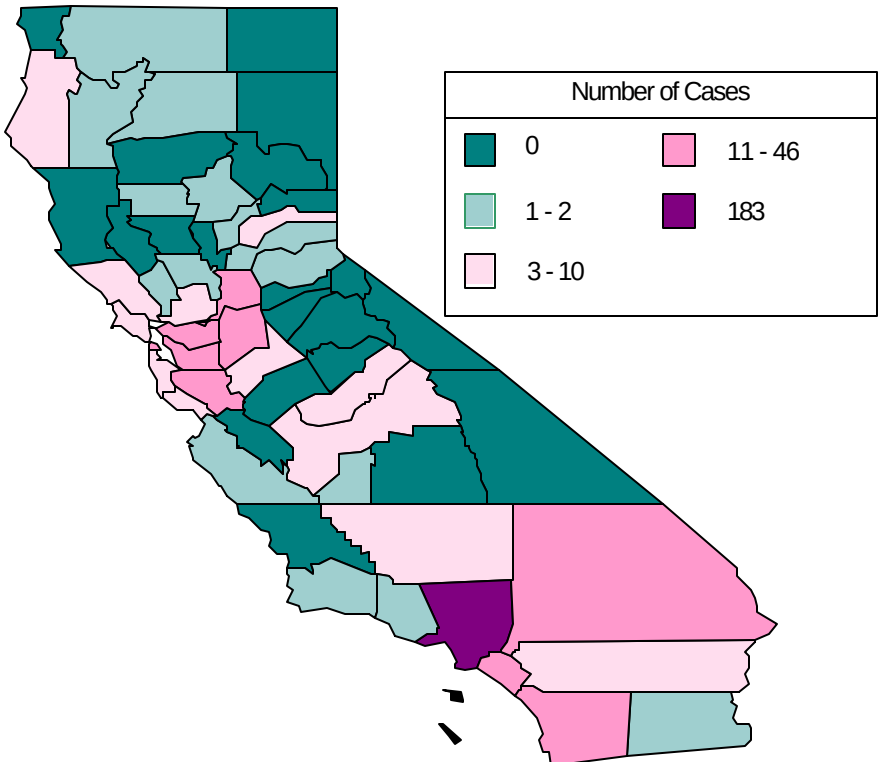
Table 1.2. Pediatric AIDS Cases and Incidence Rate per 100,000 Population by County of Residence at Onset of Illness and Year of Diagnosis (Two-Year Period), California, 1988-97

County of Residence	Year of AIDS Diagnosis										Total	Cum.
	1988-89		1990-91		1992-93		1994-95		1996-97			
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Alameda	8	3.5	6	2.5	7	2.8	6	2.3	1	0.4	28	11.5
Butte	0	0.0	0	0.0	1	2.8	1	2.8	0	0.0	2	5.6
Contra Costa	2	1.4	2	1.3	1	0.6	2	1.2	5	3.0	12	7.5
El Dorado	1	4.3	0	0.0	0	0.0	0	0.0	0	0.0	1	4.3
Fresno	1	0.7	2	1.2	1	0.5	4	2.2	2	1.1	10	5.7
Glenn	0	0.0	0	0.0	0	0.0	1	17.0	0	0.0	1	17.0
Humboldt	1	4.4	0	0.0	1	4.2	1	4.4	0	0.0	3	13.0
Imperial	0	0.0	0	0.0	0	0.0	1	3.0	0	0.0	1	3.0
Kern	0	0.0	2	1.5	1	0.7	0	0.0	1	0.6	4	2.8
Kings	0	0.0	0	0.0	1	3.9	0	0.0	0	0.0	1	3.9
Los Angeles	36	2.1	39	2.2	44	2.2	49	2.4	15	0.7	183	9.6
Madera	0	0.0	1	4.8	1	4.4	1	4.3	0	0.0	3	13.5
Marin	1	3.2	0	0.0	2	5.6	1	2.8	0	0.0	4	11.6
Monterey	0	0.0	2	2.6	0	0.0	0	0.0	0	0.0	2	2.6
Napa	0	0.0	0	0.0	0	0.0	0	0.0	1	4.9	1	4.9
Nevada	0	0.0	2	13.8	1	6.9	1	7.2	0	0.0	4	27.9
Orange	2	0.5	6	1.3	8	1.6	3	0.6	3	0.5	22	4.5
Riverside	1	0.5	4	1.5	3	1.0	1	0.3	1	0.3	10	3.6
Sacramento	2	1.0	8	3.7	4	1.7	5	2.1	2	0.9	21	9.4
San Bernardino	8	2.6	6	1.7	8	2.1	7	1.8	4	1.0	33	9.2
San Diego	12	2.7	7	1.5	12	2.3	11	2.0	4	0.7	46	9.2
San Francisco	7	7.8	5	5.6	3	3.1	2	1.9	0	0.0	17	18.4
San Joaquin	2	1.9	5	4.5	5	4.3	0	0.0	1	0.8	13	11.5
San Mateo	0	0.0	2	1.8	1	0.9	3	2.4	0	0.0	6	5.1
Santa Barbara	0	0.0	0	0.0	0	0.0	2	2.7	0	0.0	2	2.7
Santa Clara	5	1.9	2	0.7	3	1.0	1	0.3	1	0.3	12	4.2
Santa Cruz	0	0.0	0	0.0	2	4.5	0	0.0	1	2.1	3	6.6
Shasta	0	0.0	0	0.0	1	3.1	0	0.0	0	0.0	1	3.1
Siskiyou	0	0.0	0	0.0	0	0.0	1	13.1	0	0.0	1	13.1
Solano	1	1.4	2	2.6	2	2.5	0	0.0	0	0.0	5	6.5
Sonoma	4	5.8	1	1.3	0	0.0	0	0.0	0	0.0	5	7.1
Stanislaus	1	1.3	0	0.0	2	2.1	1	1.0	0	0.0	4	4.4
Trinity	0	0.0	1	39.8	0	0.0	0	0.0	0	0.0	1	39.8
Ventura	0	0.0	0	0.0	2	1.4	0	0.0	0	0.0	2	1.4
Yolo	0	0.0	0	0.0	0	0.0	0	0.0	1	3.4	1	3.4
Yuba	0	0.0	0	0.0	0	0.0	0	0.0	1	6.5	1	6.5
Total	95	1.7	105	1.7	117	1.8	105	1.6	44	0.6	466	7.4

Note: The following counties were omitted because they had no pediatric AIDS cases diagnosed during this time period: Alpine, Amador, Calaveras, Colusa, Del Norte, Inyo, Lake, Lassen, Mariposa, Mendocino, Merced, Modoc, Mono, Placer, Plumas, San Benito, San Luis Obispo, Sierra, Sutter, Tehama, Tulare, and Tuolumne.
Incidence rates for counties with less than ten cases may not be reliable.

Figure 1.3 shows the geographic distribution of pediatric AIDS cases in California. The highest number of cases were in Los Angeles, San Bernardino, Orange, and San Diego counties; the San Francisco Bay area, specifically Alameda, Contra Costa, San Francisco and Santa Clara counties; and the Central Valley counties of Sacramento and San Joaquin.

Figure 1.3. Cumulative Number of Pediatric AIDS Cases Diagnosed in California by County, 1988-97.



Mode of Exposure to HIV

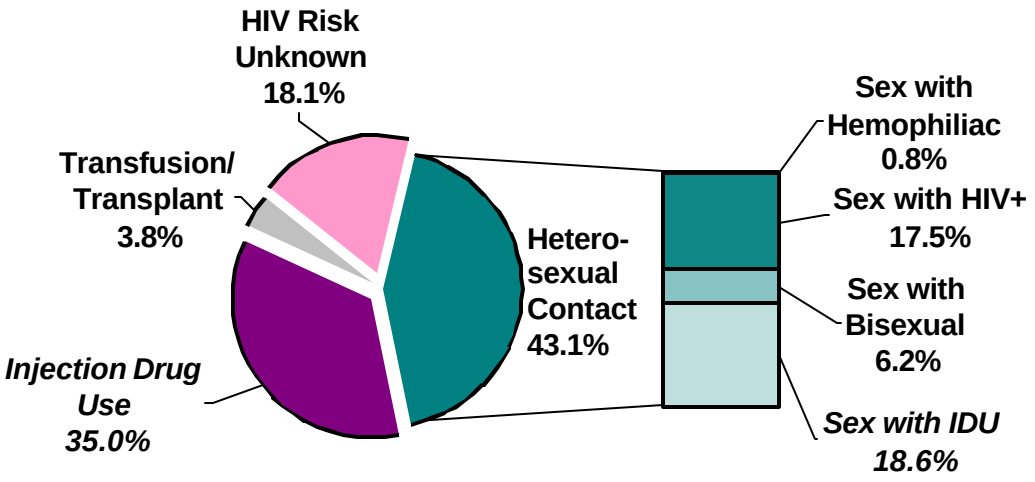
Children may contract HIV and develop AIDS through exposure to contaminated organs, blood, or blood products, or through the birth process if their mother is also infected with HIV (perinatal exposure). Table 1.3 summarizes how HIV was contracted by pediatric AIDS cases in California. The majority of cases (80%) contracted HIV through perinatal exposure.

Table 1.3. Pediatric AIDS Cases, by Mode of Exposure and Year of Diagnosis, California, 1988-1997.

Year	Mode of Exposure								
	Perinatal		Transfusion/ Transplant		Hemophiliac		Other/ Risk Not Specified		**Total**
	No.	%	No.	%	No.	%	No.	%	No.
1988	26	61.9	13	31.0	3	7.1	0	0.0	42
1989	39	73.6	10	18.8	2	3.8	2	3.8	53
1990	31	70.5	9	20.4	4	9.1	0	0.0	44
1991	44	72.1	9	14.8	8	13.1	0	0.0	61
1992	51	86.4	7	11.9	1	1.7	0	0.0	59
1993	45	77.6	12	20.7	0	0.0	1	1.7	58
1994	47	87.0	7	13.0	0	0.0	0	0.0	54
1995	45	88.2	5	9.8	1	2.0	0	0.0	51
1996	23	100.0	0	0.0	0	0.0	0	0.0	23
1997	20	95.2	0	0.0	0	0.0	1	4.8	21
Total	371	79.6	72	15.5	19	4.1	4	0.8	466

Figure 1.4 shows the mode of exposure to HIV for the mothers of the 371 perinatally-acquired pediatric AIDS cases. Injection drug use was the mode of exposure in 53.6% of these cases, either directly (the mother's own injection drug use) or indirectly (her sexual contact with an injection drug user). In 18% of cases the mother was exposed to HIV through sexual contact with an HIV positive partner, although the partner's risk for HIV was not identified. The mode of exposure to HIV was not identified in 18% of cases.

Figure 1.4. Mother's Mode of Exposure to HIV for Perinatally-Acquired Pediatric AIDS Cases, California, 1988-1997



Prevalence of Opportunistic Infections

AIDS is characterized by unusual diseases or conditions that develop as the immune system fails to fight off infectious organisms or malignancies. The most commonly reported opportunistic infections among pediatric AIDS cases are listed in Table 1.4. The most commonly reported infection was *Pneumocystis carinii* pneumonia (37%) followed by wasting syndrome and HIV encephalopathy (20%).

Table 1.4. Prevalence of Various Opportunistic Infections and AIDS-Defining Conditions Among Pediatric AIDS Cases, California, 1988-97.

Opportunistic Infection	Number	Percent
1. *Pneumocystis carinii* pneumonia	173	37.2
2. Wasting Syndrome	95	20.4
3. HIV Encephalopathy	94	20.2
4. Esophageal Candidiasis	92	19.7
5. Lymphoid Interstitial Pneumonia	80	17.1
6. Bacterial Infections	77	16.5
7. *Mycobacterium avium* Complex	73	15.6
8. Cytomegalovirus Disease	67	14.4

Children Living with AIDS in California

The numbers of children ages 0–12 that were diagnosed with AIDS and were still living are listed by year and county in Table 1.5. Although the number of AIDS cases diagnosed each year declined after 1991, the number of children living with AIDS increased. This is most likely due to the development of drug treatments that are prolonging the lives of adults as well as children with HIV infection. Table 1.6 shows the number of children who were living with AIDS by racial/ethnic group and year, along with the cumulative mortality ratio. The number of White children living with AIDS peaked in 1993 and declined each year thereafter, while the number of African American and Latino children living with AIDS is increasing each year. Of the children diagnosed with AIDS, 71.4% of Whites, 60% of African American, and 58.2% of Latinos are deceased.

Note on Table 1.5. The following counties were omitted because there were no pediatric AIDS cases diagnosed and/or living during this time period: Alpine, Amador, Calaveras, Colusa, Del Norte, Inyo, Lake, Lassen, Mariposa, Mendocino, Merced, Modoc, Mono, Placer, Plumas, San Benito, Sierra, Sutter, Tehama, and Tuolumne.

Table 1.5. Number of Living Pediatric AIDS Cases in California by County, 1988-98.

County	Number of Pediatric AIDS Cases Living as of January 1st of Each Year										
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Alameda	1	3	6	7	9	9	9	9	8	8	8
Butte	1	1	1	1	1	1	2	1	0	0	0
Contra Costa	0	0	1	1	2	1	1	1	3	3	6
El Dorado	0	0	0	0	0	0	0	0	0	0	0
Fresno	0	0	1	2	3	3	3	3	6	7	7
Glenn	0	0	0	0	0	0	0	0	1	1	1
Humboldt	0	0	1	0	0	0	1	1	2	2	2
Imperial	0	0	0	0	0	0	0	1	1	1	1
Kern	0	0	0	0	1	1	0	0	0	1	1
Kings	0	0	0	0	0	0	1	1	0	0	0
Lake	1	1	1	1	1	1	1	1	1	1	1
Los Angeles	16	19	29	34	47	61	61	68	73	71	73
Madera	0	0	0	0	1	1	2	2	2	2	2
Marin	0	0	0	0	0	0	2	2	3	3	3
Monterey	1	1	1	1	3	3	3	3	3	3	3
Napa	0	0	0	0	0	0	0	0	0	0	1
Nevada	2	2	2	2	4	5	5	5	6	6	6
Orange	2	3	2	2	7	10	13	12	14	15	15
Riverside	2	2	2	3	5	4	4	2	3	3	4
Sacramento	1	3	3	6	6	5	8	7	8	10	10
San Bernardino	2	5	6	6	9	14	12	14	16	17	19
San Diego	3	5	10	12	13	19	19	16	21	21	23
San Francisco	4	5	7	6	10	9	8	5	3	3	3
San Joaquin	0	1	2	6	5	4	7	6	6	6	6
San Luis Obispo	1	1	1	1	0	0	0	0	0	0	0
San Mateo	1	1	1	3	3	3	3	5	5	4	4
Santa Barbara	0	0	0	0	0	0	0	1	1	1	1
Santa Clara	0	3	3	3	1	1	1	0	1	1	0
Santa Cruz	0	0	0	0	0	1	2	1	0	0	0
Shasta	0	0	0	0	0	1	0	0	0	0	0
Siskiyou	0	0	0	0	0	0	0	1	1	1	1
Solano	0	0	1	2	1	2	2	1	1	1	1
Sonoma	1	3	5	5	4	4	4	3	3	3	3
Stanislaus	0	1	1	1	1	2	3	3	2	2	2
Trinity	0	0	0	1	1	1	1	1	1	1	1
Tulare	1	1	0	0	0	0	0	0	0	0	0
Ventura	0	0	0	0	0	1	0	0	0	0	0
Yolo	0	0	0	0	0	0	0	0	0	1	1
Yuba	1	1	1	1	1	1	1	1	1	1	1
Total	41	62	88	107	139	168	179	177	196	200	210

Table 1.6. Number of Living Pediatric AIDS Cases and Cumulative Mortality Rates, by Race/Ethnicity and Year, California, 1988-97.

		Total Dxd by Jan 1	Deaths by Jan 1	Total Alive Jan 1	CMR
1988	White	41	21	20	51.2%
	African American	21	14	7	66.7%
	Latino/a	34	20	14	58.8%
	Asian/PI	3	3	0	100%
	Native American	0	0	0	N/A
Total		99	58	41	58.6%
1989	White	52	27	25	51.9%
	African American	32	18	14	56.3%
	Latino/a	52	31	21	59.6%
	Asian/PI	6	4	2	75.0%
	Native American	1	0	1	0.0%
Total		141	79	62	56.0%
1990	White	69	36	33	52.2%
	African American	54	27	27	50.0%
	Latino/a	64	39	25	60.9%
	Asian/PI	6	4	2	66.7%
	Native American	1	0	1	0.0%
Total		194	106	88	54.6%
1991	White	86	46	40	53.5%
	African American	66	37	29	56.1%
	Latino/a	78	44	34	56.4%
	Asian/PI	6	4	2	66.7%
	Native American	2	0	2	0.0%
Total		238	131	107	55.0%
1992	White	111	62	49	55.9%
	African American	85	45	40	52.9%
	Latino/a	94	48	46	51.1%
	Asian/PI	7	4	3	57.1%
	Native American	2	1	1	50.0%
Total		299	160	139	53.5%
1993	White	126	71	55	56.3%
	African American	100	51	49	51.0%
	Latino/a	122	62	60	50.8%
	Asian/PI	8	5	3	62.5%
	Native American	2	1	1	50.0%
Total		358	190	168	53.1%
1994	White	135	83	52	61.5%
	African American	119	64	55	53.8%
	Latino/a	147	82	65	55.8%
	Asian/PI	11	7	4	63.6%
	Native American	4	1	3	25.0%
Total		416	237	179	57.0%
1995	White	144	101	43	70.1%
	African American	138	78	60	56.5%
	Latino/a	168	102	66	60.7%
	Asian/PI	15	10	5	66.7%
	Native American	4	2	2	50.0%
Total		470*	293	177*	62.3%
1996	White	153	109	44	71.2%
	African American	159	92	67	57.9%
	Latino/a	188	111	77	59.0%
	Asian/PI	15	11	4	73.3%
	Native American	5	2	3	40.0%
Total		521*	325	196*	62.4%
1997	White	158	113	45	71.5%
	African American	169	100	69	59.2%
	Latino/a	196	117	79	59.7%
	Asian/PI	15	12	3	80.0%
	Native American	5	2	3	40.0%
Total		544*	344	200*	63.2%
1998	White	161	115	46	71.4
	African American	175	105	70	60.0
	Latino/a	208	121	87	58.2
	Asian/PI	15	12	3	80.0
	Native American	5	2	3	40.0
Total		565*	355	210*	62.8

* Total includes one additional individual of unknown race.

Pediatric Spectrum of Disease Project Data

As of January 1, 1998 a total of 2,432 children in California had been enrolled in the Pediatric Spectrum of Disease (PSD) project. Of these, 2,146 (88.2%) were exposed to HIV perinatally; 84 (3.5%) contracted HIV during treatment for hemophilia (before factor was routinely treated to inactivate any infectious agents); 167 (6.9%) contracted HIV from contaminated blood products or organ donation; and 35 (1.4%) contracted HIV through other or undetermined means. Since the beginning of the project 339 cases (13.9%) have died. Of the 2,146 perinatally-exposed children, 913 (42.5%) were found not to be HIV infected, and laboratory confirmation of HIV infection has not yet been made for 573 (26.7%) of the cases.

Of the 1,519 confirmed or suspected HIV-infected children in the project, 479 (31.5%) have been diagnosed with AIDS (Table 1.7).

Table 1.7. Clinical Status by Race/Ethnicity, Pediatric Spectrum of Disease Project, 1982-97.

Clinical Status	Race/Ethnicity										**Total**	
	White		African American		Latino/a		Asian/Pacific Islander		Other/ Unknown			
	No.	% of Row	No.	% of Row	No.	% of Row	No.	% of Row	No.	% of Row	No.	% of Column
HIV Infected	239	23.0	422	40.6	325	31.3	28	2.7	26	2.5	1040	68.5
AIDS	126	26.3	148	30.9	183	38.2	16	3.3	6	1.3	479	31.5
Total	365	24.0	570	37.5	508	33.4	44	2.9	32	2.1	1519	100

Project staff document when children are diagnosed with an opportunistic infection or AIDS-defining condition. The top eight conditions diagnosed are listed in Table 1.8. As with AIDS case data, *Pneumocystis carinii* pneumonia was the most commonly diagnosed condition. HIV encephalopathy was diagnosed in 30.5% of PSD AIDS cases for the second most commonly diagnosed condition. Wasting syndrome, reported in 20.4% of State pediatric AIDS cases was diagnosed in only 17.1% of PSD AIDS cases.

Table 1.8. Prevalence of Various Opportunistic Infections and AIDS-Defining Conditions Among Pediatric Spectrum of Disease AIDS Cases, 1982-97.

Opportunistic Infection	Number	Percent
1. *Pneumocystis carinii* Pneumonia	183	38.2
2. HIV Encephalopathy	146	30.5
3. *Mycobacterium avium* Complex	104	21.2
4. Lymphoid Interstitial Pneumonia	101	21.1
5. Esophageal Candidiasis	101	21.1
6. Bacterial Infections	83	17.2
7. Wasting Syndrome	82	17.1
8. Cytomegalovirus Disease	68	14.2

Note: PSD project begun in 1982 at the University of California, Los Angeles Medical Center, and in 1989 at the University of California, San Diego Medical Center, and Stanford University Medical Center. Los Angeles data were extracted from the Los Angeles county pediatric spectrum of disease (PSD) 1997 year-end data summary.

State-Funded HIV Counseling and Testing Data

Children are sometimes referred to State-funded HIV counseling and testing sites for HIV risk assessment and testing services. During the period July 1, 1995 – June 30, 1997, 465 children ages 0 – 12 received testing services for the first time. Three children (0.6%) ranging in age from two years to six years were confirmed antibody positive for HIV. HIV risk was perinatal exposure for one child and was unknown or not reported for two children. They were referred to health care providers and other programs for services and case management.

AIDS Case Management Program Data

Sixty-four children utilized case management services through AIDS Case Management Program during the years 1996 and 1997. All clients were diagnosed with HIV infection or AIDS at the age of 12 or under, although the age of participating clients ranged from less than one year to 18. Fifty-sex percent (36/64) of the clients were male. Clinical status (HIV infected only or AIDS diagnosis) and race/ethnicity of the participating clients is shown in Table 1.9. Seventy-five percent of clients (48/64) were diagnosed with AIDS.

Table 1.9. Clinical Status by Race/Ethnicity, Case Management Program, 1996-97.

Clinical Status	Race/Ethnicity										**Total**	
	White		African American		Latino/a		Asian/Pacific Islander		Other/ Unknown			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
HIV Infected	6	37.5	2	12.5	8	50.0	0	0	0	0	16	25.0
AIDS	12	25.0	9	18.7	21	43.8	5	10.4	1	2.1	48	75.0
Total	18	28.1	11	17.2	29	45.3	5	7.8	1	1.6	64	100

Table 1.10 describes the type and median number of health care visits by the pediatric clients. The median number of office or emergency room visits made by participating clients averaged one every other month during the two-year period 1996-97. The majority of clients had no HIV-related hospitalizations.

Table 1.10. Type and Frequency of Health Care Services Provided to Pediatric Clients, Case Management Program, 1996-97.

Service Provided	Number Using Service, 1996-97		Health Care Service Visits or Days by Clients Using Services			Total Visits, 1996-97
	Count	%	Min.	Max.	Median	
Office/Emergency Room Visits	61	95.3	1	66	14	1028
Dental Office Visits	20	31.2	1	18	2	70
Rehabilitative Services*	16	25.0	1	44	3	122
Home Health Visits	15	23.4	1	36	9	183
HIV-Related Hospitalizations (Days)	28	43.8	2	209	26	977

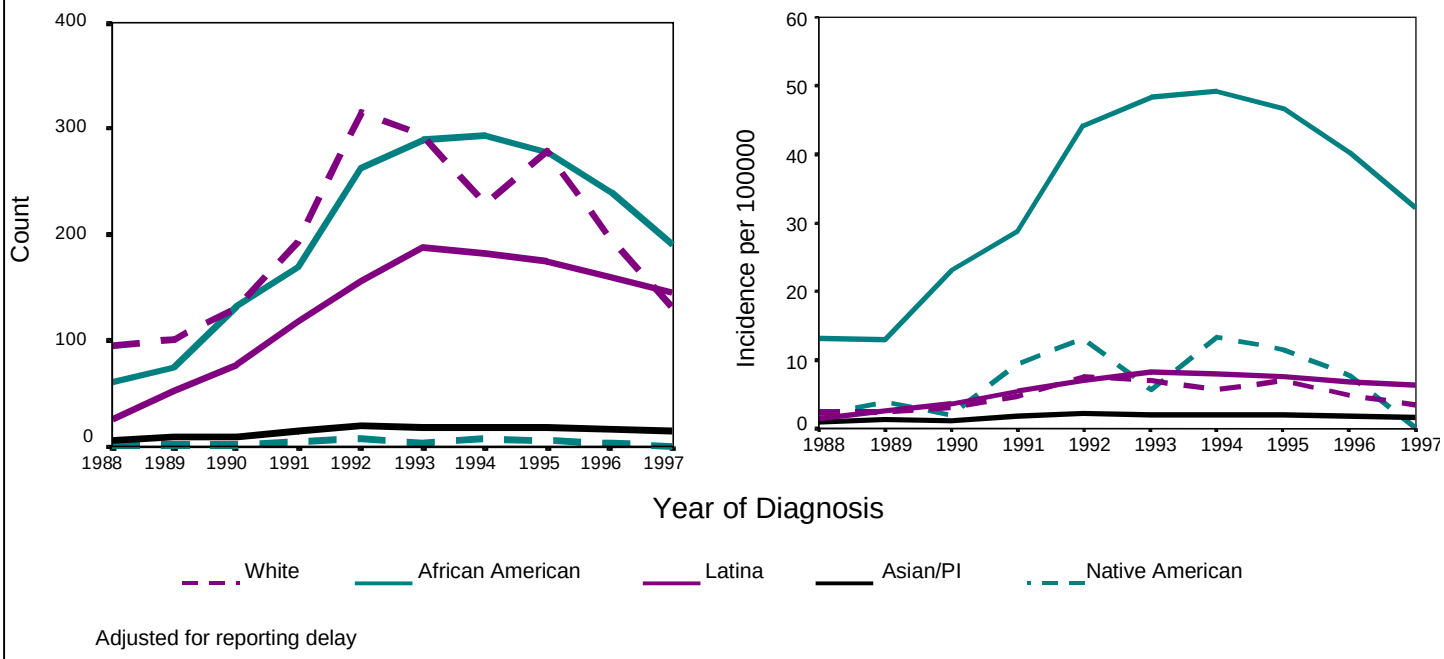
*Includes physical, speech, and occupational therapy

HIV/AIDS Among Women of Childbearing Age

Data from the California AIDS Registry System

An adjusted total of 5,434 AIDS cases among women ages 13 to 45 were diagnosed from 1988 through 1997 in California. Cases were primarily African Americans (36.9%), followed by Whites (36.2%), Latinas (23.6%), Asian/Pacific Islanders (2.6%), and Native Americans (0.7%). There were 5 cases (0.1%) with unknown race/ethnicity. Figure 2.1 presents the number of cases and incidence rate per 100,000 population for women of childbearing age by race/ethnicity in California for the years 1988 through 1997. Overall, there was an increasing trend in the number of cases among African Americans, Whites, and Latinas from 1988 to 1992. The trends in number of cases have been downward since 1995, with Whites having the sharpest decline. The incidence rate among African Americans was distinctly higher compared with other races/ethnicities during the entire study period. The peak period of incidence rate among African Americans was from 1992-1995.

Figure 2.1. AIDS Incidence Diagnosed from 1988 to 1997
In Women Between 13 and 45 Years of Age



Adjusted for reporting delay

Incidence rates were not reported for Asian/Pacific Islanders and Native Americans since the annual number of cases was predominantly less than ten.

Table 2.1. Number of Female And Percentage of Female to Male AIDS Cases Aged 13-45 by Race/Ethnicity and Year of Diagnosis, California, 1988-1997.

Year	White		African American		Latina		Asian/Pacific Islander		Native American		Total*	
	Count	(Percent)	Count	(Percent)	Count	(Percent)	Count	(Percent)	Count	(Percent)	Count	(Percent)
1988	95	(2.5)	74	(8.0)	26	(3.3)	6	(9.6)	1	(7.1)	202	(3.5)
1989	101	(2.4)	74	(8.4)	52	(5.2)	9	(7.1)	2	(6.9)	239	(3.8)
1990	131	(2.9)	133	(11.8)	77	(6.0)	9	(6.4)	1	(2.5)	351	(4.9)
1991	194	(3.3)	169	(11.8)	118	(6.9)	14	(8.5)	5	(14.3)	500	(5.4)
1992	316	(5.0)	263	(14.6)	155	(7.4)	19	(8.6)	7	(13.7)	760	(7.3)
1993	294	(5.4)	289	(16.4)	188	(8.9)	17	(7.8)	3	(6.4)	791	(8.2)
1994	228	(5.1)	294	(18.1)	182	(9.5)	17	(8.3)	7	(13.2)	728	(8.7)
1995	280	(7.0)	279	(19.6)	174	(9.4)	17	(11.1)	6	(10.7)	758	(10.1)
1996	196	(6.8)	241	(19.3)	161	(10.2)	16	(9.9)	3	(8.8)	619	(10.5)
1997	133	(7.0)	192	(20.6)	146	(11.0)	15	(14.3)	0	(0.0)	486	(11.3)
Total	1968	(4.5)	2008	(15.4)	1279	(8.2)	139	(8.9)	35	(9.2)	5434	(7.3)

Counts are adjusted for reporting delays.
* Total includes 5 female cases with unknown race/ethnicity.

There was a steady increase in the percentage of AIDS cases among women ages 13 to 45 compared to males of the same age group from 1988 to 1997 (Table 2.1). The overall percentage of female to male AIDS cases aged 13 to 45 increased from 3.5% in 1988 to 11.3% in 1997. This increasing trend was present in every racial/ethnic group. African Americans had the highest total and yearly proportion of female AIDS cases compared to all other races/ethnicities.

AIDS among Women of Childbearing Age by County

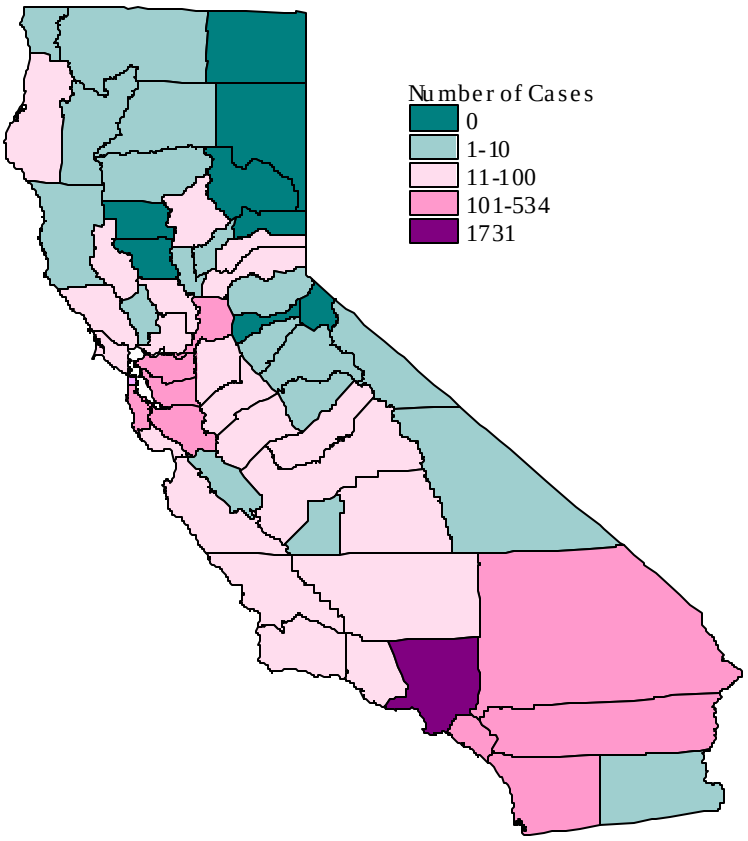
Table 2.2 presents bi-annual and total number of cases along with incidence rates per 100,000 population of women of childbearing age with AIDS in California. The five counties with the highest number of cases were Los Angeles (1,731), San Francisco (534), San Diego (468), Alameda (395), and Orange (316). The five counties with the highest 1988-1997 cumulative incidence rate per 100,000 were San Francisco (82.5), Alameda (36.7), Madera (34.1), Contra Costa (33.2), and San Mateo (26.3). San Francisco and Alameda were both among the five counties with the highest number and incidence rate in California. Almost all counties experienced a decline in the number of cases in the two-year period 1996-97 compared to 1994-95 and 1992-93. This decline may be due to the two factors explained in the Data Summary Section. First, the 1993 expansion of the AIDS case definition resulted in retrospective reporting of new definition cases. Second, from 1995 more potent drug treatments were made available to AIDS patients. Despite the decline in AIDS cases among women in this age group, the total number of cases diagnosed in 1996-97 was twice the number of cases diagnosed in 1988-89. Figure 2.2 presents the map of cumulative AIDS cases among women of childbearing age by county.

Table 2.2. Number of AIDS Cases and Incidence Rate per 100,000 Population Among Women of Childbearing Age by County of Residence at Onset of Illness and Year of Diagnosis, California, 1988-1997.

County of Residence	Year of Diagnosis										Total	Cum.
	1988-89		1990-91		1992-93		1994-95		1996-97			
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
ALAMEDA	32	3.1	52	4.9	113	10.5	111	10.2	87	7.9	395	36.7
BUTTE	1	0.7	4	2.7	4	2.6	2	1.3	1	0.6	12	7.8
CALAVERAS	0	0.0	0	0.0	0	0.0	2	6.6	2	6.5	4	13.0
CONTRA COSTA	13	2.1	40	6.1	62	9.1	64	9.2	48	6.8	227	33.2
DEL NORTE	0	0.0	0	0.0	1	4.6	0	0.0	0	0.0	1	4.6
EL DORADO	1	1.1	1	1.0	3	2.7	1	0.9	2	1.7	8	7.3
FRESNO	6	1.2	11	2.1	20	3.7	28	5.0	20	3.4	85	15.4
HUMBOLDT	3	3.2	1	1.0	4	4.0	5	4.9	2	1.9	15	15.1
IMPERIAL	2	2.6	0	0.0	0	0.0	2	1.9	0	0.0	4	4.5
INYO	0	0.0	0	0.0	1	6.6	0	0.0	0	0.0	1	6.6
KERN	3	0.8	11	2.6	16	3.6	14	3.0	12	2.5	56	12.5
KINGS	0	0.0	0	0.0	2	2.4	0	0.0	6	6.8	8	9.2
LAKE	1	2.5	3	7.1	0	0.0	4	8.9	3	6.6	11	25.1
LOS ANGELES	140	2.0	279	3.9	466	6.4	503	6.9	343	4.7	1731	23.9
MADERA	0	0.0	0	0.0	12	15.4	4	4.9	12	13.9	28	34.1
MARIN	4	2.1	4	2.0	13	6.5	8	4.0	3	1.5	32	16.0
MARIPOSA	0	0.0	0	0.0	0	0.0	0	0.0	2	14.8	2	14.8
MENDOCINO	0	0.0	1	1.5	3	4.5	1	1.5	2	2.9	7	10.4
MERCED	0	0.0	4	3.0	3	2.1	3	2.1	3	2.0	13	9.2
MONO	0	0.0	0	0.0	0	0.0	1	11.6	0	0.0	1	11.6
MONTEREY	3	1.1	10	3.5	18	6.3	15	5.4	13	4.7	59	21.0
NAPA	3	3.4	2	2.2	1	1.1	2	2.1	1	1.0	9	9.7
NEVADA	3	5.0	2	3.0	3	4.3	3	4.2	1	1.4	12	17.9
ORANGE	28	1.5	44	2.2	71	3.5	103	5.0	70	3.4	316	15.5
PLACER	0	0.0	5	3.5	3	2.0	3	1.9	2	1.2	13	8.5
RIVERSIDE	9	1.1	30	3.2	51	5.0	61	5.8	53	4.9	204	20.0
SACRAMENTO	6	0.8	26	3.1	70	8.0	46	5.2	45	5.0	193	22.1
SAN BENITO	0	0.0	1	3.5	0	0.0	2	6.2	0	0.0	3	9.7
SAN BERNARDINO	26	2.6	41	3.7	87	7.5	64	5.4	47	3.9	265	23.1
SAN DIEGO	38	2.0	75	3.7	122	5.8	120	5.7	113	5.3	468	22.4
SAN FRANCISCO	57	8.9	91	14.2	171	26.4	128	19.7	87	13.2	534	82.5
SAN JOAQUIN	6	1.7	13	3.4	17	4.3	16	4.0	11	2.7	63	16.1
SAN LUIS OBISPO	1	0.6	2	1.1	5	2.7	4	2.1	3	1.6	15	8.0
SAN MATEO	12	2.2	26	4.8	52	9.4	43	7.6	13	2.3	146	26.3
SANTA BARBARA	3	1.0	8	2.6	11	3.5	9	2.9	15	4.7	46	14.7
SANTA CLARA	12	1.0	20	1.6	57	4.5	42	3.3	41	3.1	172	13.5
SANTA CRUZ	1	0.5	7	3.7	9	4.7	6	3.1	1	0.5	24	12.6
SHASTA	4	3.6	1	0.8	2	1.6	0	0.0	1	0.8	8	6.8
SISKIYOU	0	0.0	0	0.0	1	2.8	1	2.7	0	0.0	2	5.5
SOLANO	6	2.4	10	3.7	23	8.1	14	4.8	6	2.1	59	21.1
SONOMA	4	1.3	6	1.9	18	5.4	17	5.0	6	1.7	51	15.4
STANISLAUS	6	2.3	11	3.8	11	3.6	7	2.2	5	1.6	40	13.4
SUTTER	0	0.0	0	0.0	0	0.0	0	0.0	1	1.7	1	1.7
TEHAMA	0	0.0	0	0.0	2	4.7	0	0.0	2	4.5	4	9.2
TRINITY	0	0.0	0	0.0	0	0.0	1	9.0	0	0.0	1	9.0
TULARE	3	1.3	0	0.0	5	2.0	6	2.3	5	1.9	19	7.5
TUOLUMNE	0	0.0	0	0.0	0	0.0	1	2.3	0	0.0	1	2.3
VENTURA	2	0.4	5	0.9	13	2.4	13	2.3	12	2.1	45	8.1
YOLO	1	0.9	3	2.6	2	1.7	4	3.3	1	0.8	11	9.3
YUBA	1	2.4	1	2.2	3	6.6	0	0.0	1	2.2	6	13.4
Total	441	69.1	851	116.8	1551	222.5	1484	206.1	1104	162.7	5431	777.2

Incidence rate for counties with number of cases less than ten may not be reliable. Counts adjusted for reporting delays.
Counties not listed had no AIDS cases among women of childbearing age during this time period.

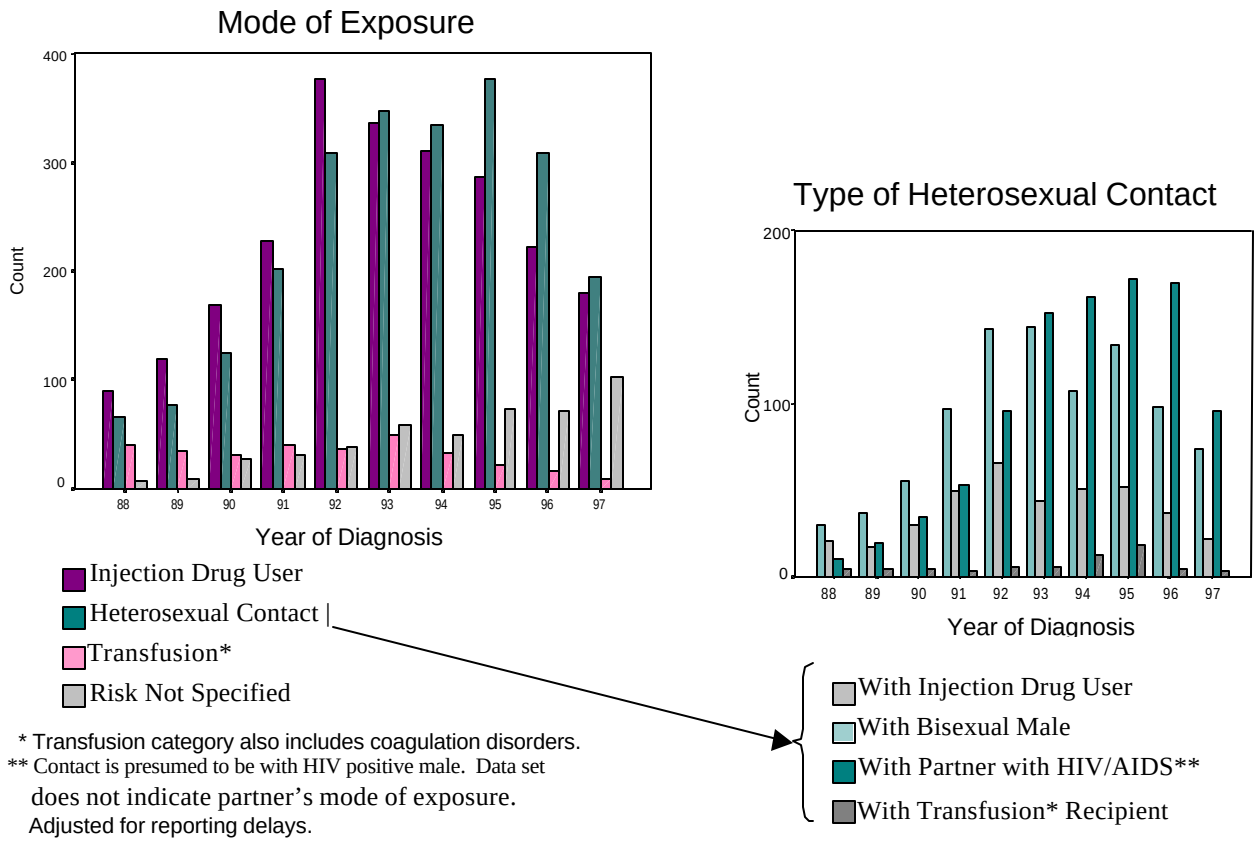
Figure 2.2. Cumulative Number of AIDS Cases among Women of Childbearing Age by County of Residence at Onset of Illness, California, 1988-97



Mode of Exposure to HIV

Distribution of mode of exposure to HIV for women of childbearing age is presented in Figures 2.3 and 2.4. Figure 2.3 presents the number of cases by mode of exposure and type of heterosexual contact. The cumulative percentages of different modes of exposure for 1988-1997 and 1997 only are given in Figure 2.4. Heterosexual contact and injection drug use were the predominant modes of exposure. The number of transfusion cases declined over time. There was an increase in the number of risk not reported or identified cases. A portion of these cases will be re-classified to other modes of exposures over time based on the results of follow-up investigations. Of those who indicated heterosexual contact as their mode of exposure, an increasing number were those who had sexual contact with a partner with HIV or AIDS whose mode of exposure was not specified. Sexual contact with an injection drug user was the next most common category of exposure to HIV reported by women.

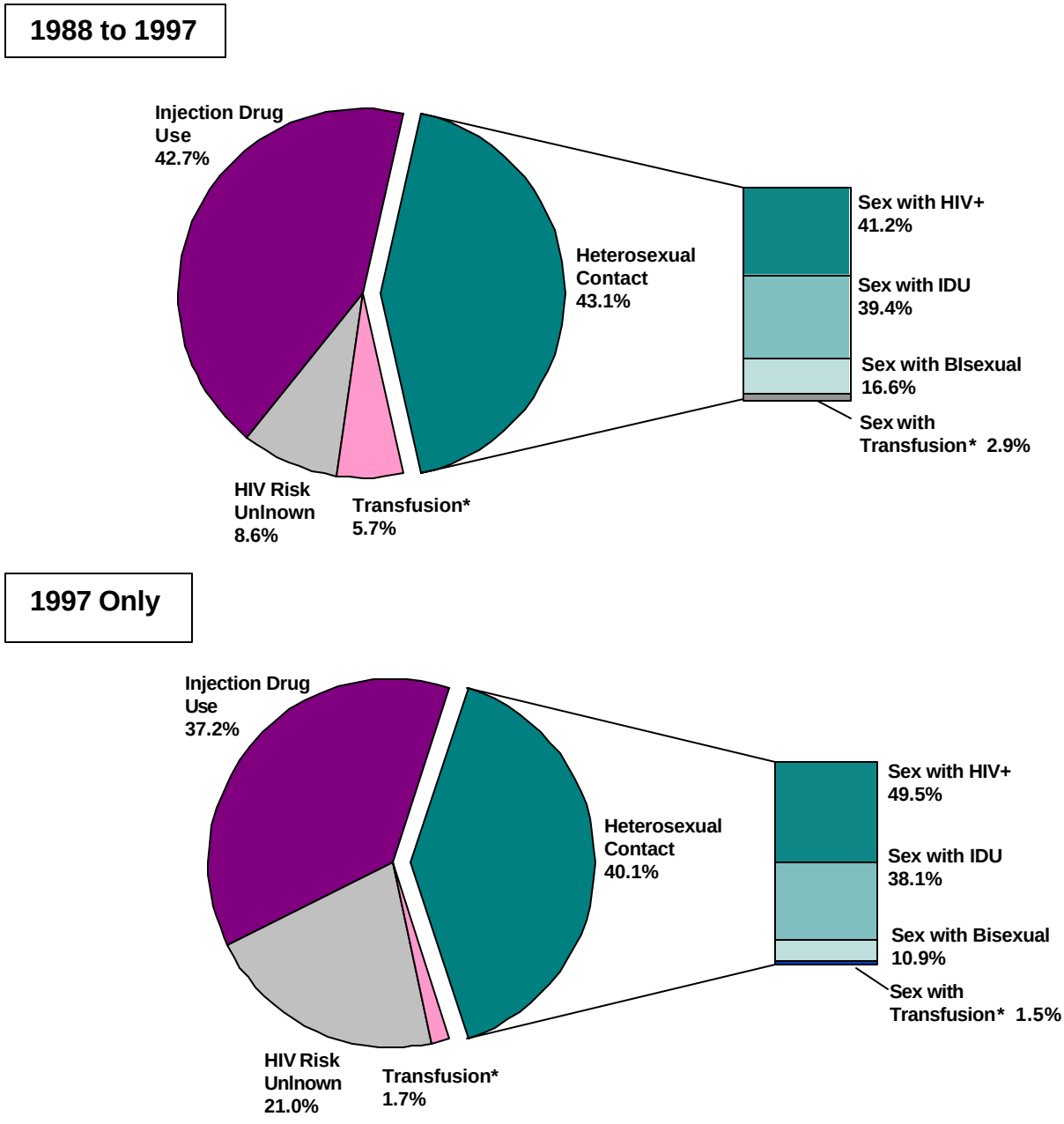
Figure 2.3. Mode of Exposure to HIV Among Women of Childbearing Age with AIDS In California, 1988-1997



* Transfusion category also includes coagulation disorders.
** Contact is presumed to be with HIV positive male. Data set does not indicate partner's mode of exposure.
Adjusted for reporting delays.

The 1997 distribution of women of childbearing age by mode of exposure is very similar to the 1988-1997 cumulative distribution. The increase in the percentage of risk not specified category is due to the time lag of follow-up and reallocation of these cases. Of those who had heterosexual contact as their mode of exposure, 49.5% had sex with a partner with HIV/AIDS in 1997 compared to 41.2% cumulative 1988-1997.

Figure 2.4. Mode of Exposure to HIV among Women of Childbearing Age, California, Cumulative and 1997 Only



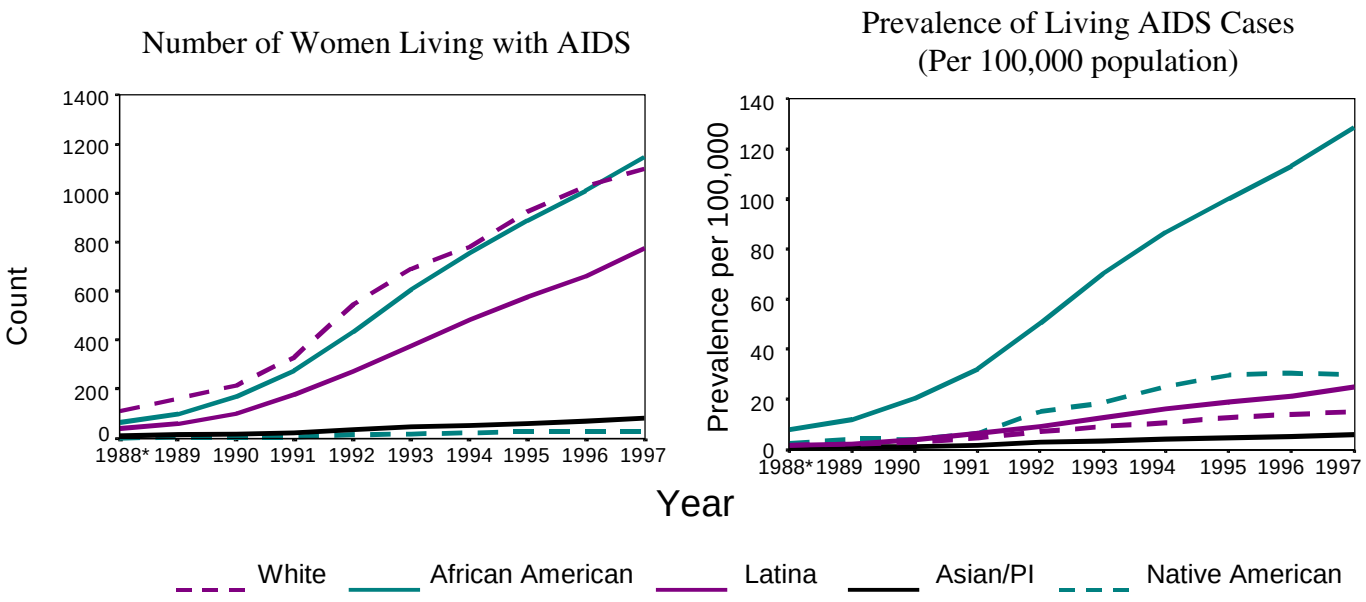
*Transfusion category also includes coagulation disorders.
Adjusted for reporting delays.

Living AIDS Cases among Women of Childbearing Age in California

The number of living AIDS cases among women of childbearing age in California, cumulative and annual deaths, and cumulative mortality ratio by race/ethnicity and year of diagnosis are given in Table 2.3. As of January 1, 1998, there were a total of 3,153 childbearing age women living with AIDS in California. There was a steady increase in the number of childbearing age women living with AIDS since 1988. The sharpest increase in the number of living cases in 1993 was partly due to expansion of the AIDS case definition. The annual number of deaths increased from 1988 through 1995, and had a slight decrease in 1996. The sharp decline in the annual number of deaths in 1997 is partly due to reporting delays of death and effect of more potent treatments.

Figure 2.5 presents the number and prevalence of women ages 13 to 45 living with AIDS in California. Although the number of African American women living with AIDS was comparable to the number of their White counterparts, prevalence of AIDS among African Americans was much higher than the prevalence of AIDS among other racial/ethnic groups. The number of Latinas living with AIDS was also increasing over time.

Figure 2.5. Number and Prevalence of Living Women of Childbearing Age with AIDS by Race/Ethnicity and Year of Diagnosis, California, 1988-1997



* These data include all women reported with AIDS prior to July 1, 1988, including those diagnosed prior to 1988.
Adjusted for reporting delays.

Table 2.3. Number of Alive, Annual and Cumulative Deaths, and Cumulative Mortality Ratio among Women of Childbearing Age, by Race/Ethnicity and Year, California, 1988-1997.

		Alive Prior to 1/1	Cum. Deaths Prior to 1/1	Annual Deaths	CMR* per 100
1988	White	57	66	36	53.7
	African American	36	40	43	52.6
	Latina	26	23	15	46.9
	Asian/PI	5	3	1	37.5
	Native American	1	0	0	0.0
Total		125	132	95	51.4
1989	White	116	102	46	46.8
	African American	67	83	38	55.3
	Latina	37	38	28	50.7
	Asian/PI	10	4	7	28.6
	Native American	2	0	1	0.0
Total		232	227	120	49.5
1990	White	171	148	76	46.4
	African American	103	121	61	54.0
	Latina	61	66	32	52.0
	Asian/PI	12	11	6	47.8
	Native American	3	1	1	25.0
Total		350	347	176	49.8
1991	White	226	224	82	49.8
	African American	175	182	65	51.0
	Latina	106	98	43	48.0
	Asian/PI	15	17	7	53.1
	Native American	3	2	3	40.0
Total		525	523	200	49.9
1992	White	338	306	103	47.5
	African American	279	247	103	47.0
	Latina	181	141	61	43.8
	Asian/PI	22	24	5	52.2
	Native American	5	5	0	50.0
Total		825	723	272	46.7
1993	White	551	409	145	42.6
	African American	439	350	115	44.4
	Latina	275	202	81	42.3
	Asian/PI	36	29	8	44.6
	Native American	12	5	0	29.4
Total		1313	995	349	43.1
1994	White	700	554	137	44.2
	African American	613	465	144	43.1
	Latina	382	283	76	42.6
	Asian/PI	45	37	9	45.1
	Native American	15	5	2	25.0
Total		1755	1344	368	43.4
1995	White	791	691	133	46.6
	African American	763	609	150	44.4
	Latina	488	359	79	42.4
	Asian/PI	53	46	9	46.5
	Native American	20	7	2	25.9
Total		2115	1712	373	44.7
1996	White	938	824	97	46.8
	African American	892	759	115	46.0
	Latina	583	438	77	42.9
	Asian/PI	61	55	8	47.4
	Native American	24	9	3	27.3
Total		2498	2085	300	45.5
1997	White	1032	921	58	47.0
	African American	1018	874	55	46.2
	Latina	667	515	33	43.6
	Asian/PI	69	63	2	47.7
	Native American	25	12	1	32.4
Total		2816	2385	149	45.9
1998	White	1112	979	NA	46.8
	African American	1155	929	NA	44.6
	Latina	780	548	NA	41.3
	Asian/PI	82	65	NA	44.2
	Native American	24	13	NA	35.1
Total		3153	2534	NA	44.6

*Cumulative Mortality

NA = Not applicable. Year 1998 was outside the study period.

Data from the California Childbearing Women Survey

The Centers for Disease Control and Prevention funded the population-based HIV seroprevalence in California childbearing women survey from 1988 through 1995 in order to monitor the prevalence of HIV infection among childbearing women. The survey of childbearing women is a systematic, unlinked testing of newborn infants for HIV. Since the antibody to HIV is passively transferred across the placenta during pregnancy, the HIV seropositivity status of the newborn is a reflection of the mother's HIV positivity status. Table 2.4 presents the number of HIV positives and the prevalence of HIV per 1,000 population among childbearing women in California. The prevalence of HIV ranged between 0.55 to 0.80 during the study period with the highest rate per 1,000 in 1991 (0.80).

Table 2.4. HIV Seroprevalence in California Childbearing Women, 1988-1995.

	Year of Survey							
	1988	1989	1990	1991	1992	1993	1994	1995
Number of HIV +	100	89	106	124	101	83	105	88
Prevalence per 1,000	0.76	0.64	0.70	0.80	0.67	0.55	0.73	0.65

This survey was done in the third quarter of each year.
Source of Data: "HIV Seroprevalence in California Childbearing Women 1995" report prepared by Juan Ruiz, M.D., Dr. P.H. and Donna Zukowski.

Table 2.5 shows the number of HIV positives and prevalence rates per 1,000 in the last three years of the Childbearing Women Survey. African American women had the highest prevalence rate per 1,000 in 1993 through1995 with the highest rate in 1994. Latinas and African American women had the highest number of HIV positives in these three years.

Table 2.5. HIV Seroprevalence in California Childbearing Women by Race/Ethnicity, 1993-95.

	Year of Survey					
	1993		1994		1995	
	Number HIV+	Prevalence per 1,000	Number HIV+	Prevalence per 1,000	Number HIV+	Prevalence per 1,000
White	12	0.2	24	0.5	17	0.4
African American	29	2.7	38	3.9	25	2.8
Latina	39	0.5	38	0.6	44	0.7

There were 10 positives among Asian, Native American, Pacific Islander, and mixed races/ethnicities in 1993-95.
Source of Data: "HIV Seroprevalence in California Childbearing Women 1995" report prepared by Juan Ruiz, M.D., Dr.P.H. and Donna Zukowski.

Data from the California State-Funded HIV Testing Sites

From July 1,1995 through June 30, 1997, California State testing programs provided 189,114 HIV tests to women of childbearing years throughout the state

There is a long standing awareness among HIV prevention program people and policy planners that some HIV counseling and testing clients are repeat clients. This characteristic sometimes results in meaningful differences among clients. All analyses were conducted separating first-time and repeat clients. In this analysis, few differences were found. Those that were found will be noted in the text.

Table 2.6 illustrates the number of HIV positive versus HIV negative childbearing age women for first-time and repeat testers. The total number of childbearing women in our sample was 189,114, of which 850 were HIV infected. Repeat testers had a slightly higher percentage of HIV infections compared to first-time testers (0.5% vs. 0.4%). This suggest a higher incidence among repeat testers as most repeaters were HIV negative following their last test.

Table 2.6. Comparison of HIV Test Result among Women of Childbearing Age, First-Time and Repeat Testers, California, July 1995-June 1997.

	Type of Tester					
	Positive		Negative		Total	
Type of Tester	No.	%	No.	%	No.	%
First-Time	310	0.4	80,543	99.6	80,853	100
Repeat	540	0.5	107,721	99.5	107,721	100
Total	850	0.5	188,264	99.5	189,114	100

Demographic Variables Associated with HIV Infection

Figure 2.6 shows the distribution of HIV infected childbearing age women by race/ethnicity among first-time and repeat testers. There were no meaningful differences between first-time and repeat testers. However, African American women had the highest number and percentage of HIV infections compared to White and Latina first-time and repeat testers (37% vs. 31% and 25%, respectively).

Figure 2.6. Distribution of HIV Infection by Race/Ethnicity among Women of Childbearing Age First-Time and Repeat Testers

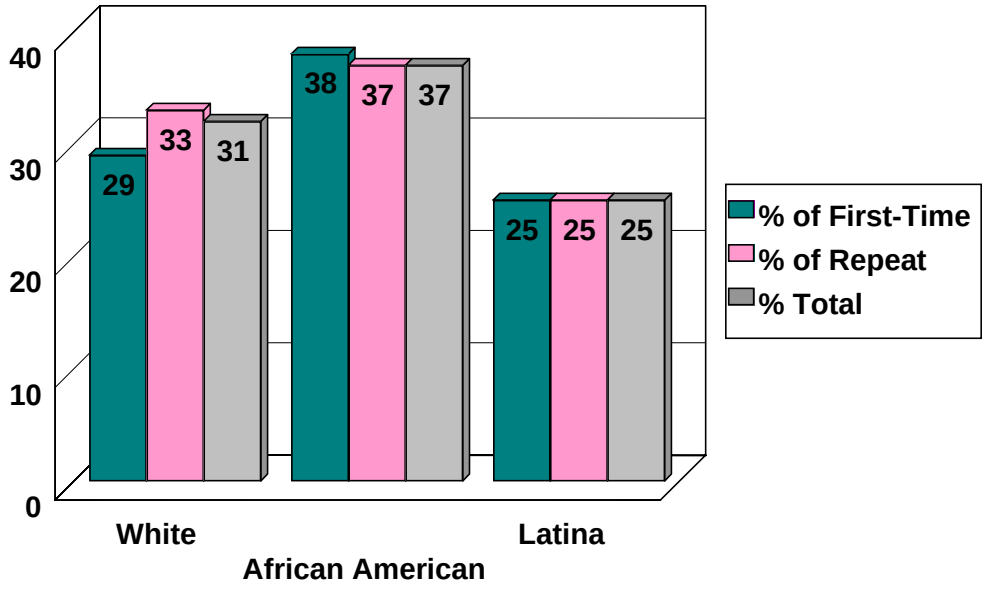


Figure 2.7 illustrates the distribution of HIV positive women by age groups. However, women 30-39 years old had the highest number and percentage of HIV infections compared with other age groups (41%). Women who were 20-29 years old had the next highest number and percentage of HIV infections (33%).

Figure 2.7. Distribution of HIV Infection by Age among Women 13-45, First-Time and Repeat Testers

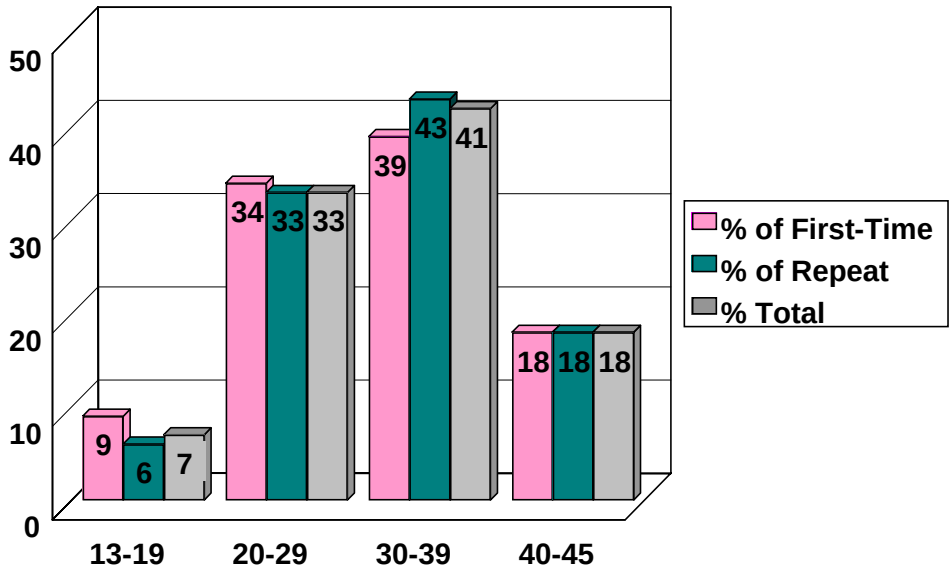


Figure 2.8 shows that the majority of the HIV infected women used alternative test sites (36%), other health departments (18%) and family planning clinics (13%) to test for HIV seropositivity. The overall HIV infection rate was 0.5%.

Figure 2.8. Distribution of HIV Infected Women by Testing Clinic/Site Type, California, July 1995-June 1997

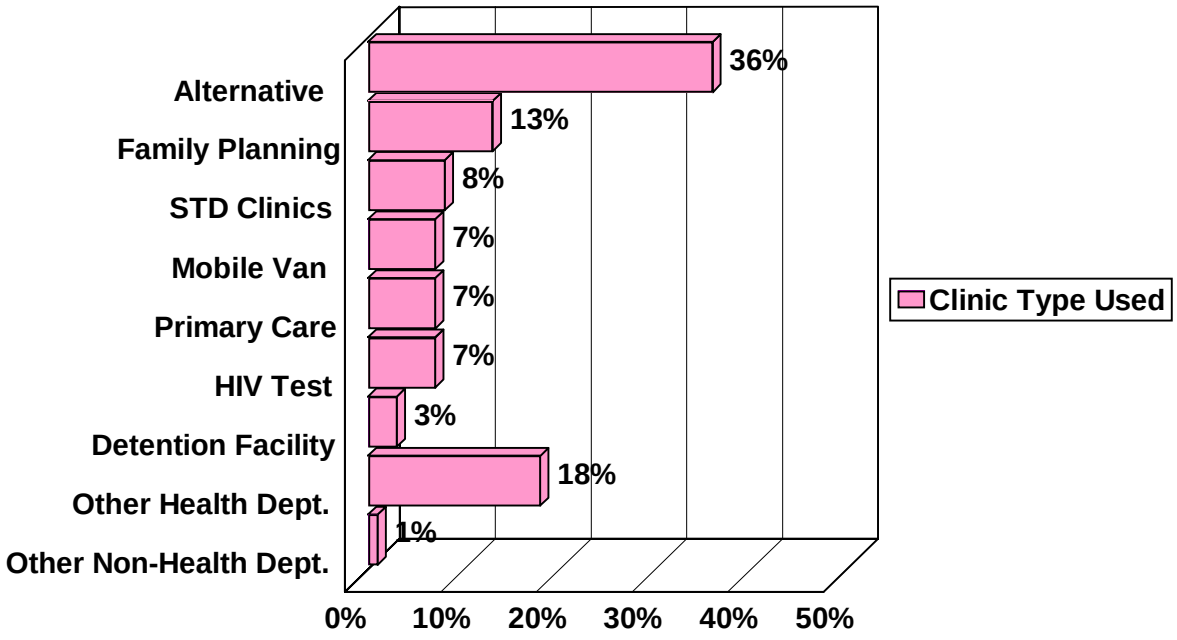


Table 2.7 summarizes the number and percentage of HIV infected women by county of residence. Urban counties such as Los Angeles (18%), Alameda (14%), San Diego (8%), Orange (7%), and San Francisco (7%) constitute the highest percentage of HIV positives compared to other counties. There were almost twice as many repeat testers in Alameda (65% vs. 35%) and San Diego (63% vs. 37%) counties than there were first-time testers. Repeat testers were slightly more represented in Los Angeles (56% vs. 44%) and Orange (57% vs. 43%) counties than first-time testers.

Table 2.7. Distribution of HIV Infected Women of Childbearing Age at State-Funded HIV Test Sites in California, July 1995-June 1997, by County of Residence.

County of Residence	No. HIV Infected	% HIV Infected
Alameda	104	14
Amador	2	0
Butte	3	0
Contra Costa	28	4
Del Norte	1	0
El Dorado	2	0
Fresno	27	4
Humboldt	1	0
Imperial	1	0
Kern	23	3
Kings	4	1
Lake	1	0
Lassen	1	0
Los Angeles	136	18
Long Beach	1	0
Madera	8	2
Marin	10	2
Mendocino	1	0
Merced	3	0
Monterey	4	1
Napa	4	1
Nevada	2	0
Orange	53	7
Placer	3	0
Riverside	21	3
Sacramento	35	5
San Benito	3	1
San Bernardino	22	3
San Diego	65	8
San Francisco	52	7
San Joaquin	13	2
San Luis Obispo	4	1
San Mateo	25	3
Santa Barbara	3	0
Santa Clara	10	2
Santa Cruz	1	0
Shasta	4	1
Siskiyou	2	0
Solano	4	1
Sonoma	4	1
Stanislaus	14	2
Tehama	2	0
Tulare	8	2
Tuolumne	1	0
Ventura	7	1
Yolo	1	0
Total (N=188,988)	724	100 %

Note on table 2.7: The following local health jurisdictions were omitted because there were no HIV infected women of childbearing age during the study period: Alpine, Berkeley, Calaveras, Colusa, Glenn,

Inyo, Mariposa, Modoc, Mono, Pasadena, Plumas, Sierra, Sutter, Trinity, and Yuba. Sixty-four first-time and 62 repeat tester cases were not reported due to missing data.

Behavioral Variables Associated with HIV Infection

Figure 2.9 shows the number of sexual partners in the last 12 months reported by HIV infected women. Ten percent of HIV infected women reported having no sexual partner in the last year. Almost half of HIV infected women (42%) reported one sexual partner in the last year. There were no differences between types of clients in this group.

Figure 2.9. Distribution of HIV Infected Women's Sex Partners in the Last 12 Months

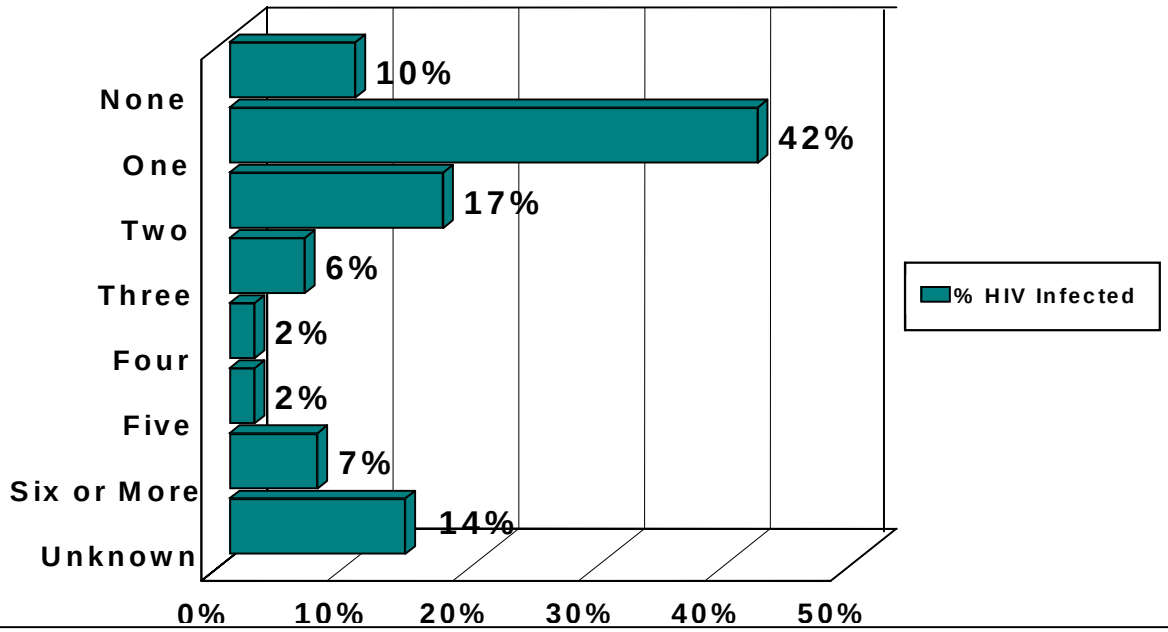
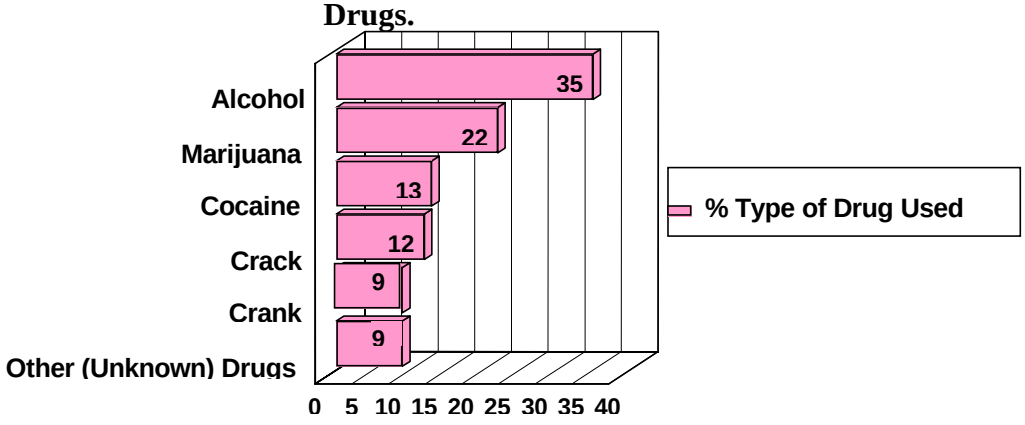


Figure 2.10 summarizes non-injection drugs used by HIV infected women. First-time testers (41%) reported higher percentage of alcohol use than repeat testers (33%). Cocaine, crack, and crank have previously been associated with HIV infection and were used relatively often by these women.

Figure 2.10. Distribution of HIV Infected Women who used Non-Injection Drugs.



Note on Figure 2.10: It is possible for a single client to report multiple non-injection drug use.

Table 2.8 illustrates the history of sexually transmitted disease among women of childbearing age first-time and repeat testers. Repeat testers (38%) had a far higher percentage of an STD diagnosis in their lifetime than first-time clients (18%). This data along with HIV infection rates suggest that repeat women are self-selecting for higher known risk.

Table 2.8. History of Sexually Transmitted Disease among HIV Infected First-Time and Repeat Clients.

History of Sexually Transmitted Disease						
	History		No History		Total	
Type of Tester	No.	%	No.	%	No.	%
First-Time	42	18	189	82	231	100
Repeat	175	38	283	62	458	100
Total	217	31	472	69	689	100

Note on table 2.8: History of STD refers to a woman who has ever been diagnosed with an STD. Seventy-nine first-time and 82 repeat tester cases were not reported due to missing data.

Overall, 6% of HIV infected women were pregnant in our sample. Table 2.9 shows the rate of HIV infection of first-time and repeat pregnant testers. Pregnant women who were repeat testers had almost twice the HIV infection (7% vs. 3.7%).

Table 2.9. Pregnancy Status of HIV Infected Women of Childbearing Age among First-Time and Repeat Testers.

Pregnancy Status						
	Pregnant		Not Pregnant		Total	
Type of Tester	No.	%	No.	%	No.	%
First-Time	9	4	237	96	246	100
Repeat	32	7	426	93	458	100
Total	41	6	663	94	704	100

Note on table 2.9: Sixty-four first-time and 82 repeat tester cases were not reported due to missing data.

Table 2.10 profiles HIV infected women (first-time and repeat testers) by risk. Risk categories were derived from behaviors reported by the client to the HIV counselor and noted on the HIV Counseling and Testing Report Form. These behaviors are ranked by decreasing risk of exposure and the client is assigned the category producing the greatest probable risk for contracting HIV. For example, Hetero./Multi Partners are those women who reported having a male partner and also reported at least two partners in the last

year. A heterosexual with multiple partners is ranked, by empirical odds to be at less risk for HIV than an injection drug user, being the partner of an HIV positive, etc. Repeat testers reported injection drug use more than three times more often compared to first-time testers (15% vs. 4%). Repeat testers also reported having an HIV positive partner (11% vs. 6%), being heterosexual with multiple male partners (9% vs. 5%), and being the partner of someone who has multiple partners (7% vs. 4%) at a higher percentage than first-time testers.

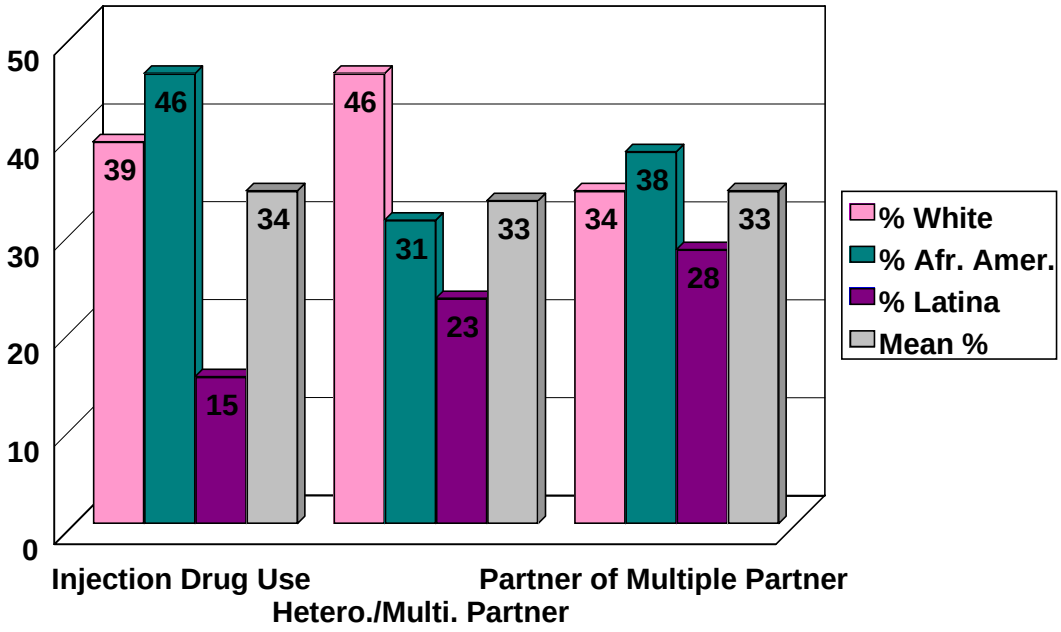
Table 2.10. Distribution of HIV Infection by Risk among First-Time and Repeat Childbearing Age Women, California, July 1995-June 1997.

Risk Category	No. HIV Infected		% HIV Infected
Injection Drug Use	First	32	4
	Repeat	113	15
Partner of HIV+	First	46	6
	Repeat	90	11
Partner of Bisexual Male	First	6	1
	Repeat	21	3
Partner of IDU	First	21	3
	Repeat	29	29
Sex for Drugs/Money	First	7	1
	Repeat	24	3
Transfusion	First	3	3
	Repeat	7	1
Hetero./Multi. Partner	First	36	5
	Repeat	68	9
Part. of Multi. Partner	First	31	4
	Repeat	56	7
Occupational	First	2	0
	Repeat	2	0
No Reported Risk	First	48	6
	Repeat	44	6
Unknown	First	44	6
	Repeat	40	5
Total (N=189,034)		770	100

Note on table 2.10. Risk categories not listed had no HIV positive cases reported from first-time and repeat testers. Thirty-four first-time and 46 repeat tester cases were not reported due to missing data.

A separate analysis of risk category by race revealed that African American women had HIV risks of injection drug use (46% vs. 39% and 15%, respectively) and being the partner of someone who has multiple partners (38% vs. 34% and 28%, respectively) more often than their White and Latina counterparts (Figure 2.11). White women reported a higher percentage of being heterosexual with multiple male partners (46% vs. 31% and 23%, respectively) than African Americans and Latinas. Finally, Latinas reported the lowest percentage of injection drug use (15% vs. 39% and 46%, respectively), being heterosexual with multiple male partners (23% vs. 46% and 31%, respectively), and being the partner of someone who has multiple partners (28% vs. 34% and 38%, respectively).

Figure 2.11. Distribution of HIV Risk by Race/Ethnicity among Women of Childbearing Age



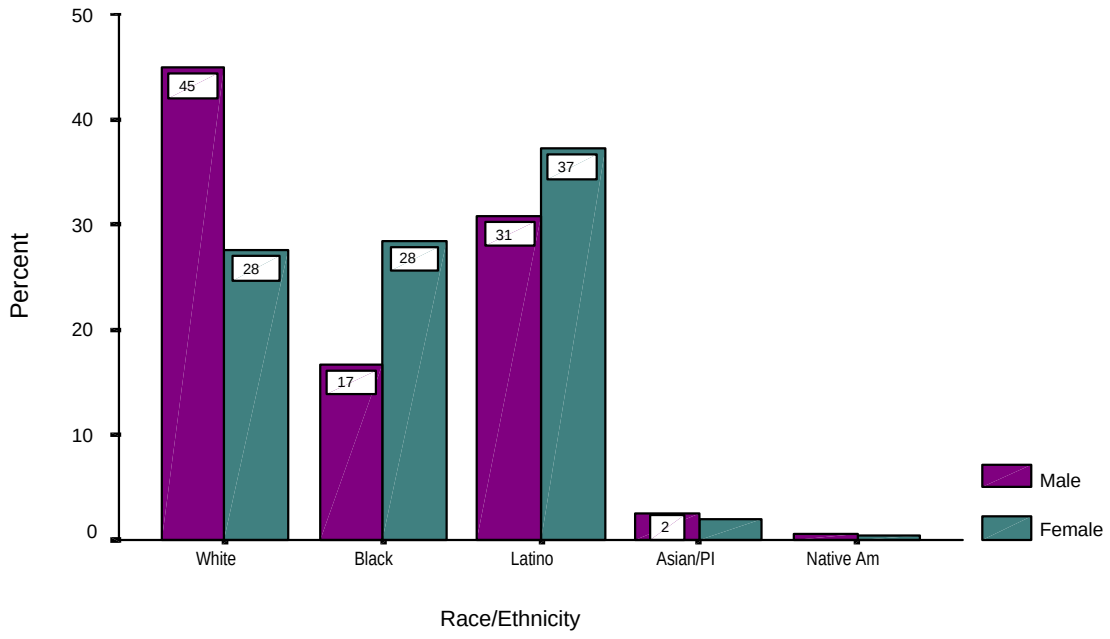
Data from the AIDS Drug Assistance Program

Women of Childbearing age accounted for 83% (2239) of the ADAP female client caseload for the years 1996 and 1997. More than half of these women received services in Los Angeles County.

Latinas accounted for 36% of all women between 13-45 years of age, the largest racial/ethnic group served among women of childbearing age. In contrast, White males, which accounted for 45% of 13-45 year old males, was the largest racial/ethnic group served (Figure 2.12).

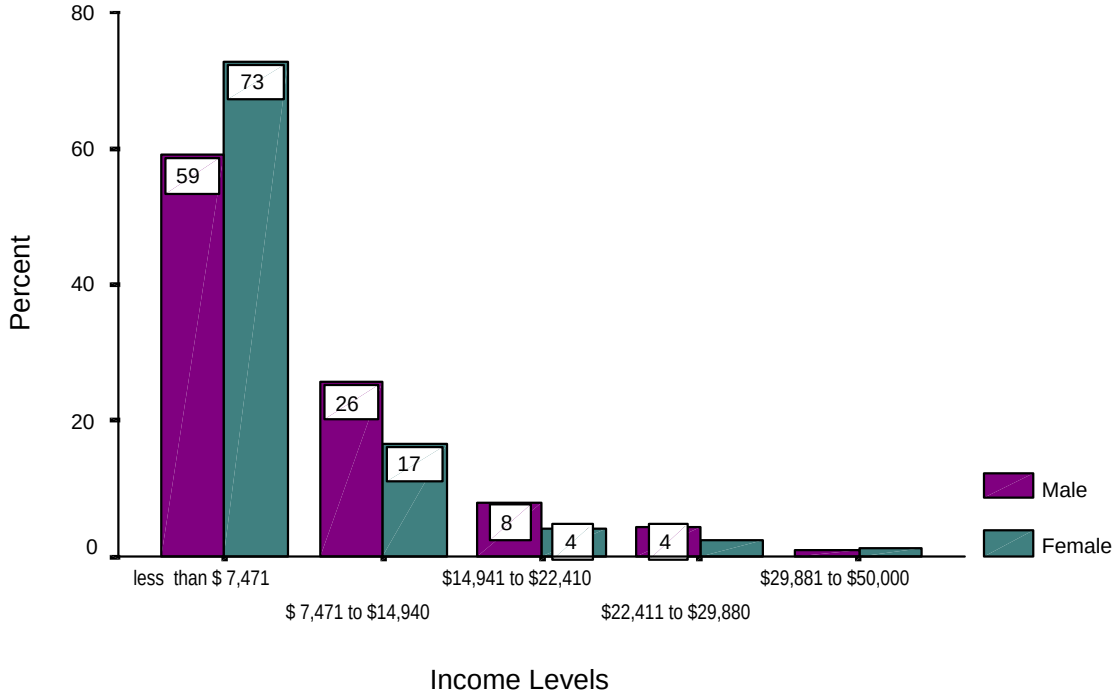
Similar to Latinas, Black women who accounted for 28% of women of childbearing age were disproportionately over-represented by gender. Of 13 to 45 year old women, Asian/Pacific Islanders accounted for 2.3% while Native Americans/Indians accounted for 0.7% (Figure 2.12).

Figure 2.12. Comparison of Racial/Ethnic Distribution of 13-45 Year Old ADAP Clients by Gender



Among 13-45 year old clients served in 1996 and 1997, females had lower annual income than males (Figure 2.13). The median income for females was $2,544 compared to $5,204 for males. Nearly three out of four childbearing age women had annual incomes less than $7,471 or less than 100% of the 1996 federal poverty level (FPL). A quarter of all women of childbearing age served in 1996 and 1997 earned between $7,470 and $29,880. Only 1.6% of the female clients in this age group had annual incomes between $29,881 and $50,000.

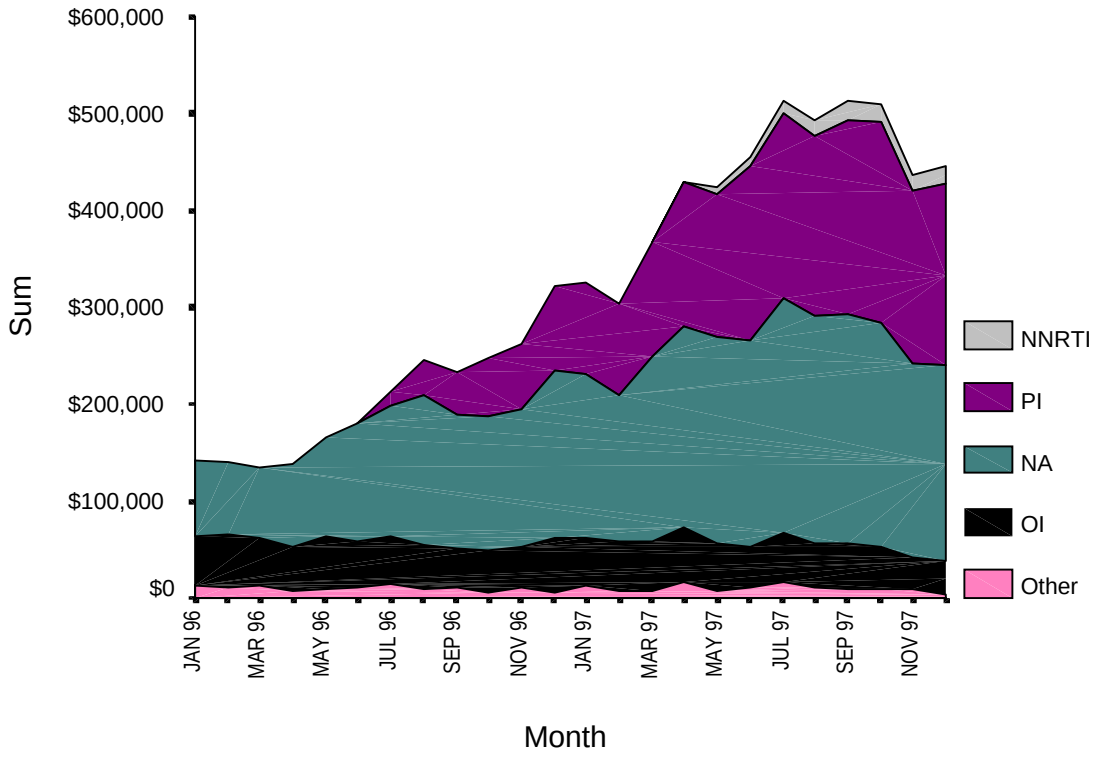
Figure 2.13. Distribution of Annual Income by Gender among 13-45 Year Old ADAP Clients served in California, 1996-97.



About 65% of childbearing age women in ADAP were determined to rely solely on the program to pay their prescription costs while 13% rely on ADAP to subsidize some of their prescription costs. ADAP was not able to determine if a client relied solely on ADAP or had a third party payor to cover prescription costs for 22% of the childbearing age women population.

Increasing expenditures for protease inhibitors (PIs) was observed shortly after their inclusion in the ADAP formulary (Figure 2.14). In 1996, ADAP antiretroviral drug expenditures for childbearing women totaled $1.73 million. Total antiretroviral expenditures grew to $4.54 million in 1997. This growth can be attributed to the increasing utilization of PIs. Expenditures for drugs indicated for the treatment of opportunistic infections decreased slightly from $ 0.57 million in 1996 to $0.55 million in 1997. Expenditures for other drugs remained constant at $0.12 million annually.

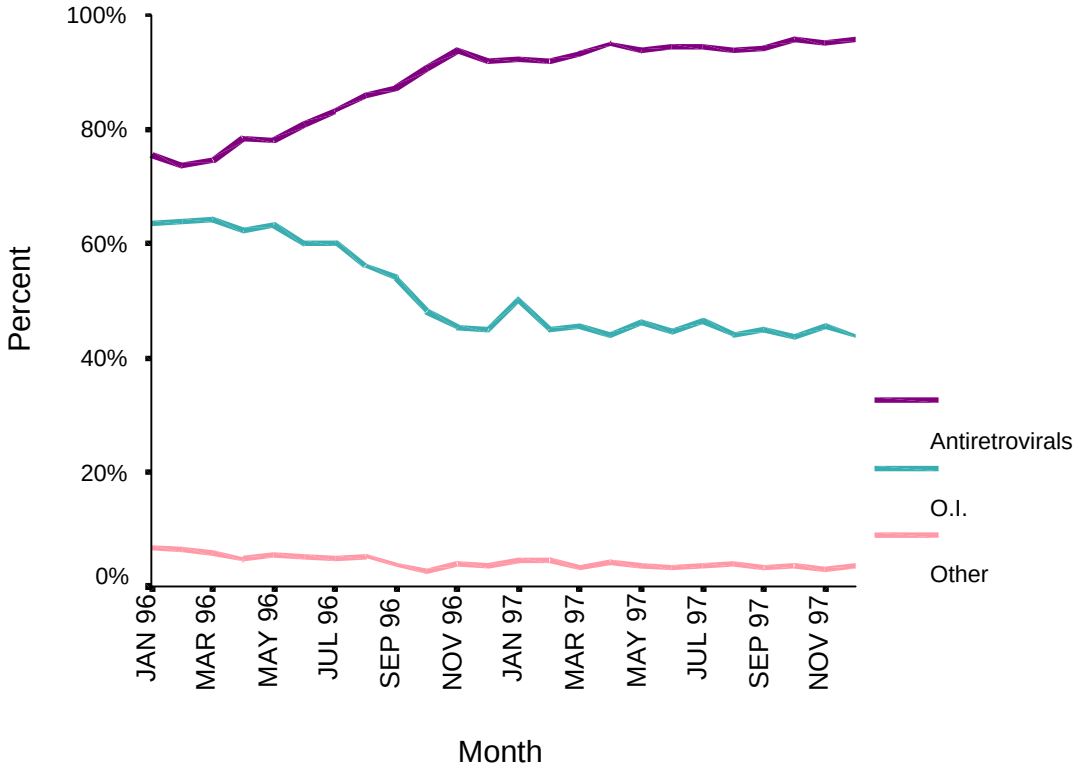
Figure 2.14. Monthly Drug Expenditures for Female ADAP Clients of Childbearing Age Served in California, 1996-97.



Protease inhibitors (PIs) were added to the formulary in April 1996 while non-nucleoside reverse transcriptase inhibitors (NNRTIs) were added in April 1997. Nucleoside analogues (NAs), drugs for the treatment of opportunistic infections (O.I. drugs) and ancillary drugs (other) were on the formulary prior to 1996.

The increase in popularity of antiretroviral therapy was apparent in the drug utilization patterns among women of childbearing age (Figure 2.15). In early 1996, only 74% of women were receiving antiretroviral medications. By late 1997, 96% were on antiretroviral therapy. The proportion of clients receiving drugs for the treatment of opportunistic infections has steadily declined from 64% in early 1996 to 44% by late 1997. The proportion of clients on drugs for ancillary HIV therapy has slowly declined from 7% in early 1996 to 4% in late 1997.

Figure 2.15. Monthly Proportion of Female Clients of Childbearing Age on Various Treatment Regimens, California, 1996-97.



Data from the Case Management Program

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Age at Enrollment

The age at enrollment (Figure 2.17) was similar for all ethnic groups among women of childbearing age. There were only 7 women enrolled in the 13 to 20 age range. A total of 295 (71%), of the women were enrolled when they were from 31 to 45 years old. There were 33 women who were diagnosed by the age of 45 but were not enrolled in the program until they were 46 or older. The mean time from diagnosis to enrollment was 3.4 years, with a minimum of less than one year and a maximum of 14 years.

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Figure 2.16. Women of Childbearing Age Served in the CMP, by Race/Ethnicity, 1996 - 1997

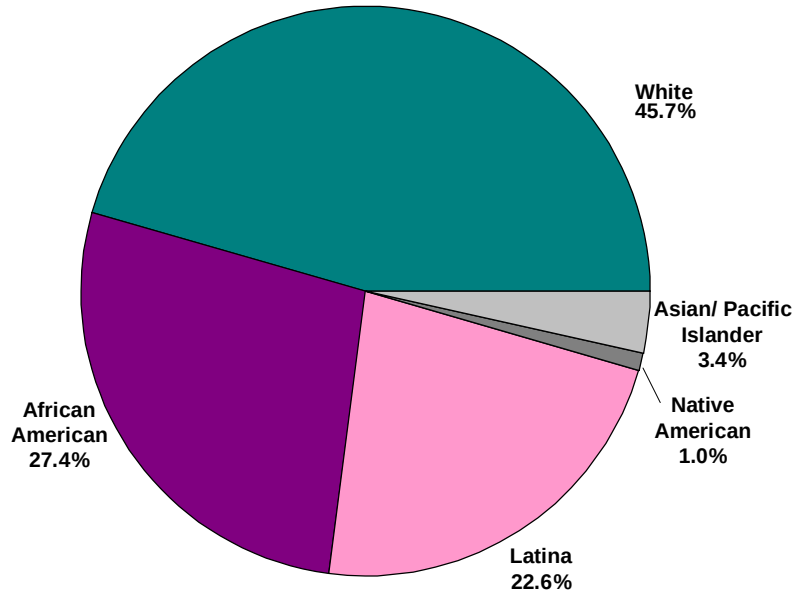
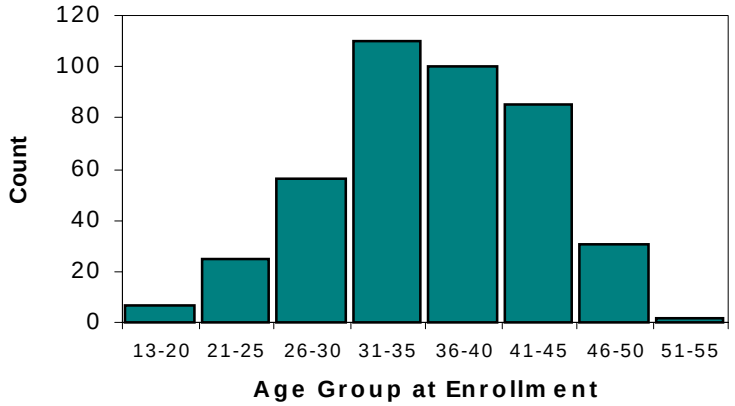
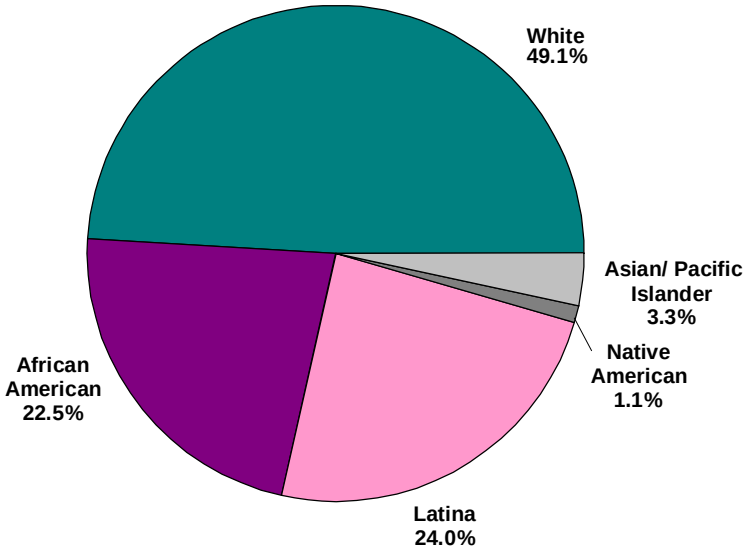


Figure 2.17. Age at Enrollment into the CMP of Women of Childbearing Age, 1996 - 1997



Ethnicity	Mean Age
White	36.7
African American	36.7
Latina	33.4
Asian/Pacific Islander	35.6
Native American	35.5
Total	35.9

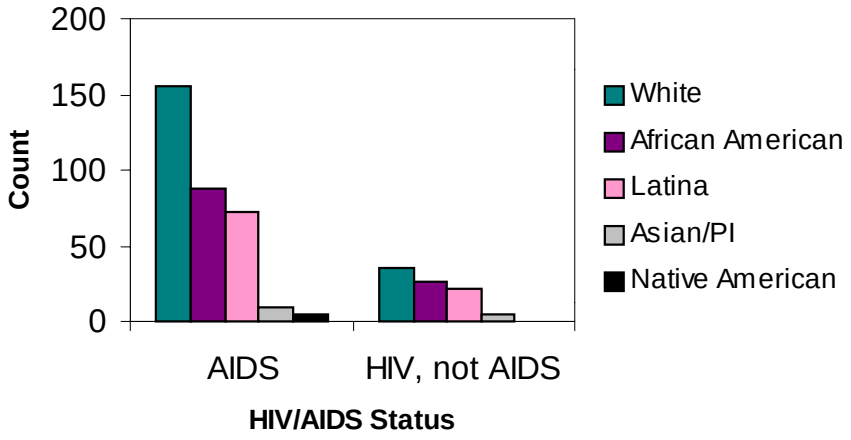
Figure 2.18. Childbearing Women with Income Below 300% of Federal Poverty Income Guidelines Served by the CMP, by Race/Ethnicity, 1996 - 1997



HIV/AIDS STATUS

The Case Management Program primarily serves clients in the later stages of the disease, which is evidenced by 79% of the clients of childbearing age having a diagnosis of AIDS and only 21% having been diagnosed with HIV but not AIDS (Figure 2.19). The ethnic distribution among those with AIDS diagnoses was similar to those with HIV only, with the exception that there were fewer White women with HIV only.

Figure 2.19. HIV/AIDS Status of Women of Childbearing Age Served by the CMP, by Race/Ethnicity 1996 - 1997



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In the Case Management data a woman may be reported in more than one exposure category. For example, if a woman reports both injection drug use and heterosexual contact as possible modes of exposure, she would be listed under both modes. Heterosexual contact with a person who has or is at increased risk for HIV was the most commonly reported mode of exposure with 318 women diagnosed between ages 13 and 45 reporting this type of exposure. There were 114 women who reported injection drug use as a mode of exposure and 24 women with blood disorder, transfusion, tissue or perinatal exposure. Additional age breakdowns are given in Figure 2.20. Heterosexual contact was the most frequently reported mode of exposure in the three age categories: women who were under 20, women between 21 and 35 and women who were 36 to 45 when first diagnosed. Figure 2.21 shows the ethnic breakdown of the women who reported they had: A) been an injection drug user (IDU), B) had heterosexual contact with a person with or at increased risk for HIV and C) had hemophilia or coagulation disorder, blood transfusion or components, or tissue or perinatal exposure. A woman may be in any or all three groups, or in none of them if her exposure was other or unknown.

Figure 2.20. Modes of Exposure by Women of Childbearing Age served by the CMP by Age at Diagnosis, 1996 - 1997

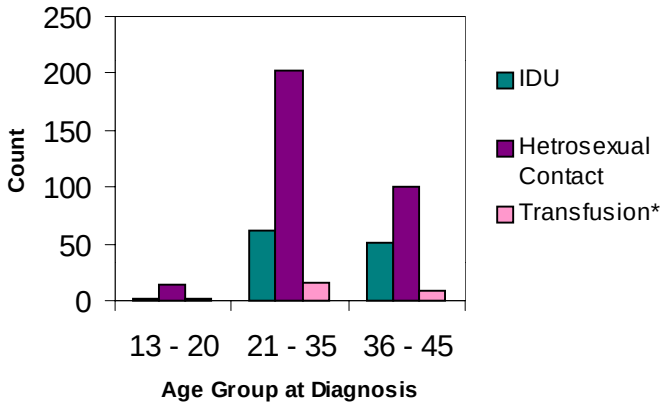
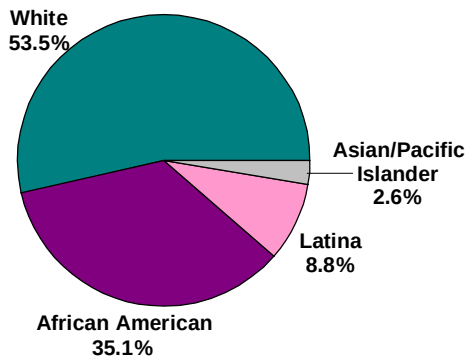
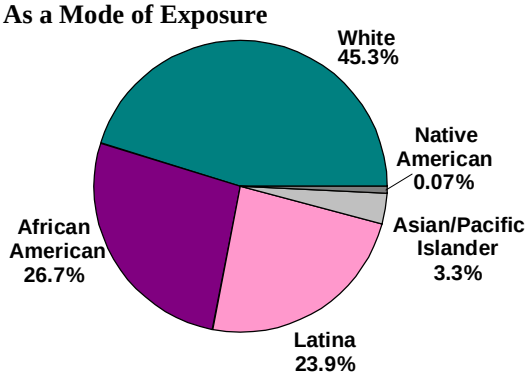


Figure 2.21. Modes of Exposure Reported by Women of Childbearing Age Served by the CMP, by Race/Ethnicity, 1996 – 1997.

A. Women Who Reported Injection Drug Use As a Mode of Exposure



B. Women Who Reported Heterosexual Contact As a Mode of Exposure



C. Women Who Reported Transfusion* As a Mode of Exposure

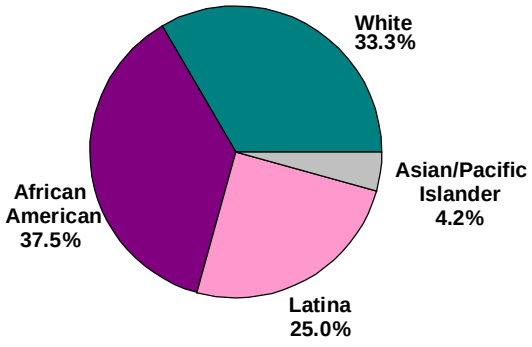


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Table 2.11. Health Care Service Usage by Women of Childbearing Age Served by the CMP, 1996 – 1997.

	Number Using Service, 1996-1997		Number of Office-Based Visits By Clients Using Service			Total Visits for
Service	Count	(%)	Min.	Max.	Median	1996-1997
Medical	368	88.5%	1	130	10	5612
Dental	95	22.8%	1	19	2	354
Substance Abuse	63	15.1%	1	449	9	2919
Mental Health	185	44.5%	1	226	5	2239
Rehabilitation	40	9.6%	1	63	4	355

Table 2.12. Direct Care Service Usage by Women of Childbearing Age Served by the CMP, 1996 – 1997.

	Number Using Service, 1996-1997		Number of Hours Reported For Clients Using Service			Total Hours for
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Skilled Nursing	77	18.5%	1	627	11	3100
Specialized Care	42	10.1%	1	128	6	637
Practical Care	178	42.8%	1	511	10	6069
Emotional Care	173	41.6%	1	212	9	3107

Table 2.13. Financial Assistance Provided to Women of Childbearing Age Served by the CMP, 1996 – 1997.

	Number Provided Assistance, 1996-1997		Amount Provided to Clients Using Assistance			Total $$ For
Type of Assistance	Count	(%)	Min.	Max.	Median	1996-1997
Transportation	130	(31.3)	$ 1	$ 1,520	$ 59	$ 17,103
Housing	123	(29.6)	$ 2	$13,753	$ 600	$ 177,752
Food	234	(56.3)	$ 4	$ 5,443	$ 282	$ 160,258
Other Financial	135	(32.5)	$ 1	$ 3,643	$ 145	$ 44,493

Disenrollment and Death

There were 82 deaths reported between January 1, 1996 and December 31, 1997 among women in the CMP who were diagnosed between ages 13 and 45. During this same time period, 240 of these women were disenrolled for reasons other than death. The primary reason for disenrollment was transfer to the AIDS Medi-Cal Waiver Program, which accounted for 83 disenrollments, or 34.6% of the disenrollments not due to death. Other reasons for disenrollment include improved health and clients who chose to disenroll.

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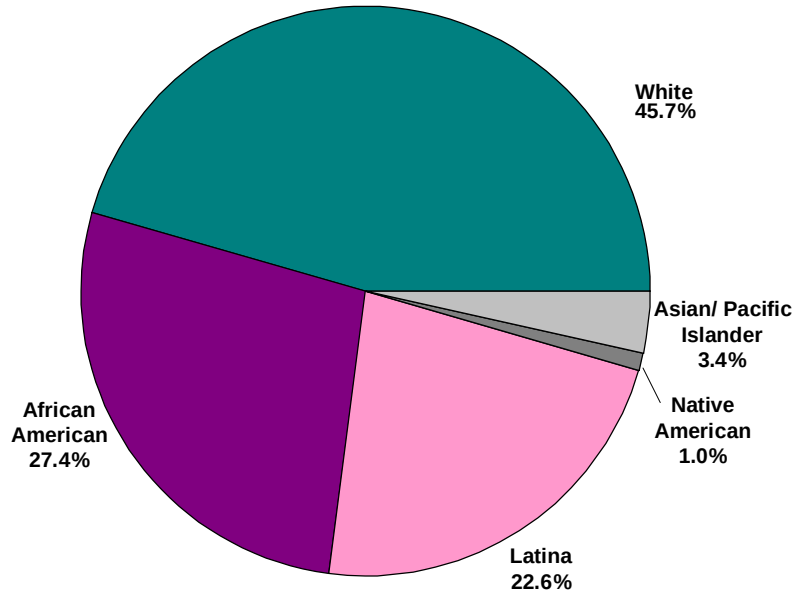

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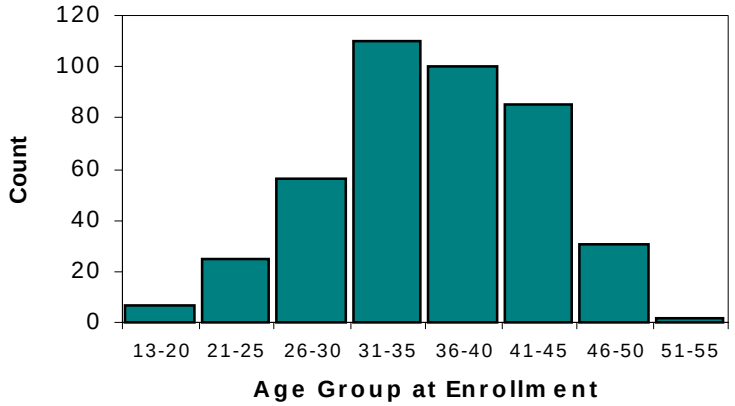

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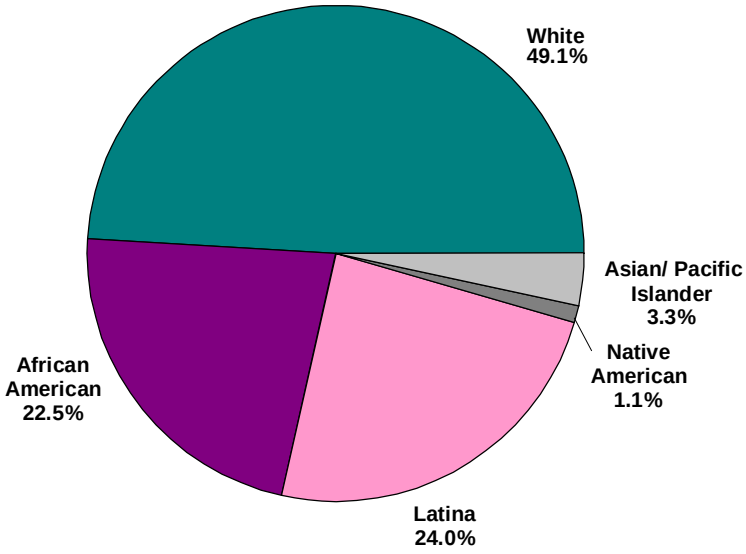

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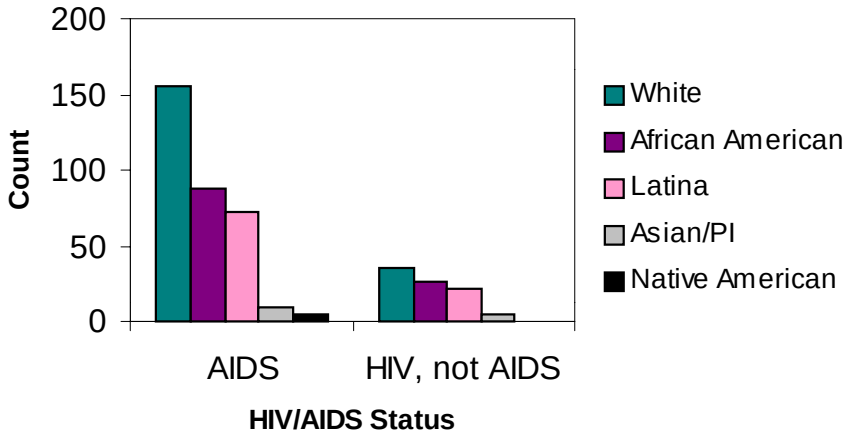

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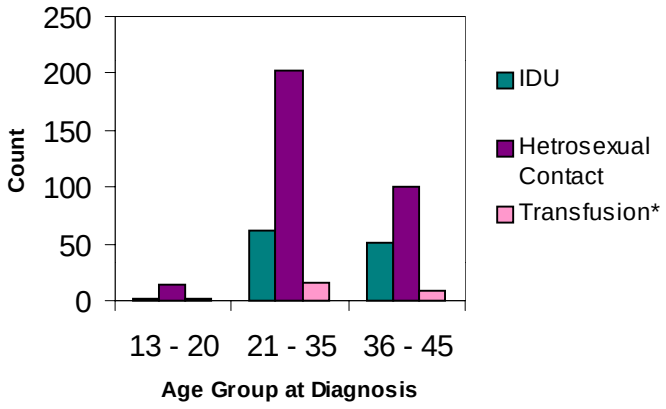

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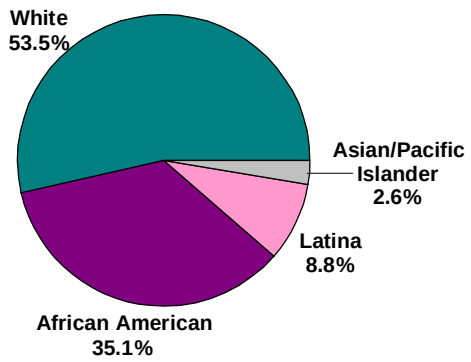

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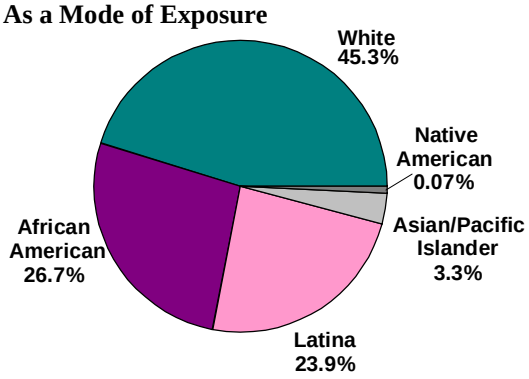

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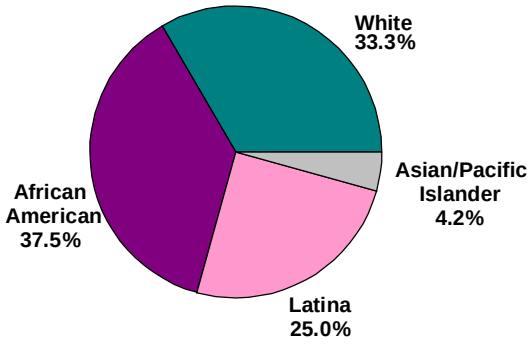

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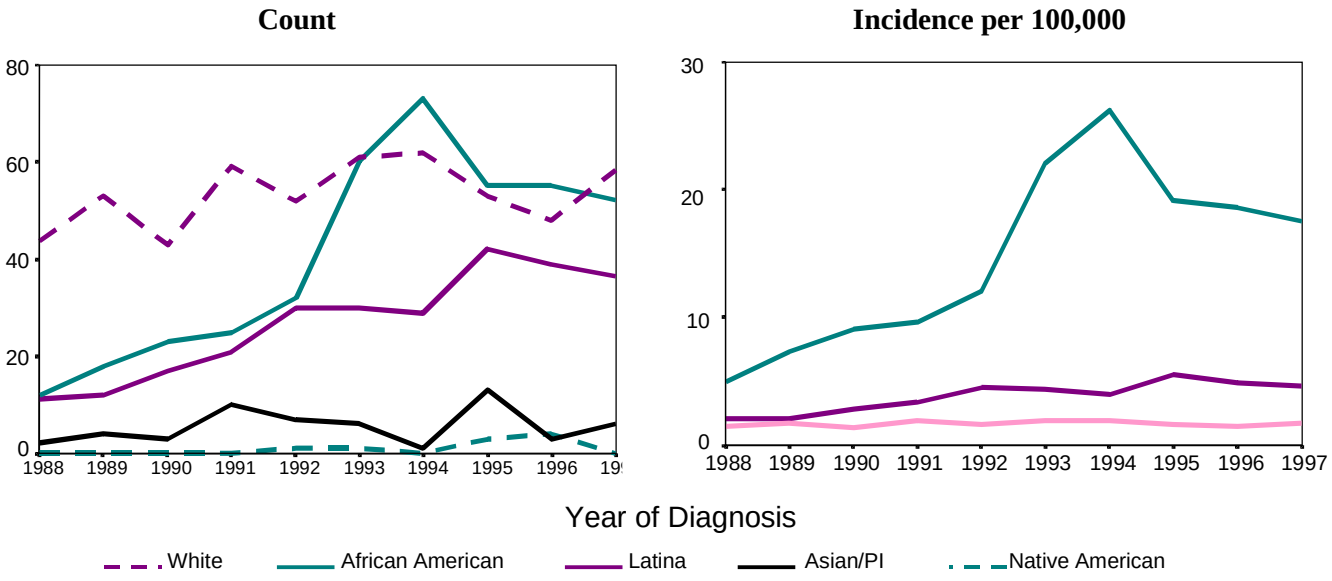
HIV/AIDS Among Women Aged 46 and Over

Data from the California AIDS Registry System

An adjusted total of 1,272 AIDS cases among women ages 46 and over were diagnosed from 1988 through 1997 in California. Cases were primarily Whites (41.9%), followed by African Americans (31.9%), Latinas (21.0%), Asian/Pacific Islanders (4.3%), and Native Americans (0.7%). There were 2 cases (0.2%) with unknown race/ethnicity. The trend in number of cases among Whites had a plateau around 50 cases with minor fluctuations throughout the study period. There was an increasing trend in the number of cases among African Americans with the highest peak at 73 in 1994 and among Latinas with the highest peak at 42 in 1995 (Figure 3.1). The incidence rate among African Americans was distinctly higher compared with other races/ethnicities during the entire study period. The incidence rate among African Americans was the highest in 1994.

Figure 3.1. AIDS Incidence among Women Aged 46 and Over in California, by Race/Ethnicity 1988-97



Adjusted for reporting delays

Incidence rate was not reported for Asian/Pacific Islanders (Asian/PI) and Native Americans since the annual number of cases was predominantly less than ten.

Table 3.1. Number of Female And Percentage of Female to Male AIDS Cases Aged 46 and Over by Race/Ethnicity and Year of Diagnosis, California, 1988-1997.

Year	White		African American		Latino/a		Asian/Pacific Islander		Native American		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1988	44	(4.6)	12	(7.6)	11	(7.7)	2	(8.7)	0	(0.0)	70	(5.5)
1989	53	(4.6)	18	(10.4)	12	(6.6)	4	(12.1)	0	(0.0)	87	(5.6)
1990	43	(3.5)	23	(10.7)	17	(8.3)	3	(10.0)	0	(0.0)	86	(5.1)
1991	59	(3.8)	25	(8.5)	21	(7.0)	10	(29.4)	0	(0.0)	115	(5.2)
1992	52	(3.1)	32	(8.3)	30	(8.8)	7	(14.6)	1	(16.7)	122	(5.0)
1993	61	(4.0)	60	(15.7)	30	(9.2)	6	(13.0)	1	(20.0)	159	(6.9)
1994	62	(5.0)	73	(19.8)	29	(9.8)	1	(2.6)	0	(0.0)	165	(8.4)
1995	53	(4.9)	55	(15.9)	42	(13.3)	13	(27.1)	3	(33.3)	166	(9.2)
1996	48	(5.8)	55	(18.2)	39	(15.1)	3	(8.3)	4	(40.0)	149	(10.4)
1997	58	(9.2)	52	(21.4)	37	(15.7)	6	(20.0)	0	(0.0)	153	(13.4)
Total	533	(4.5)	405	(14.1)	268	(10.3)	55	(15.0)	9	(18.0)	1272	(7.1)

Adjusted for reporting delays.
Total includes two female cases with unknown race/ethnicity.

The percentage of AIDS cases among women ages 46 and over compared to males of the same age group increased from 1992 (5.0%) to 1997 (13.4%)(Table 3.1). African Americans and Latinas experienced similar rise since 1992. The 1997 increase in the percentage of White women in this age group in comparison to 1996 percentage is notable.

AIDS among Women Aged 46 and Over by County

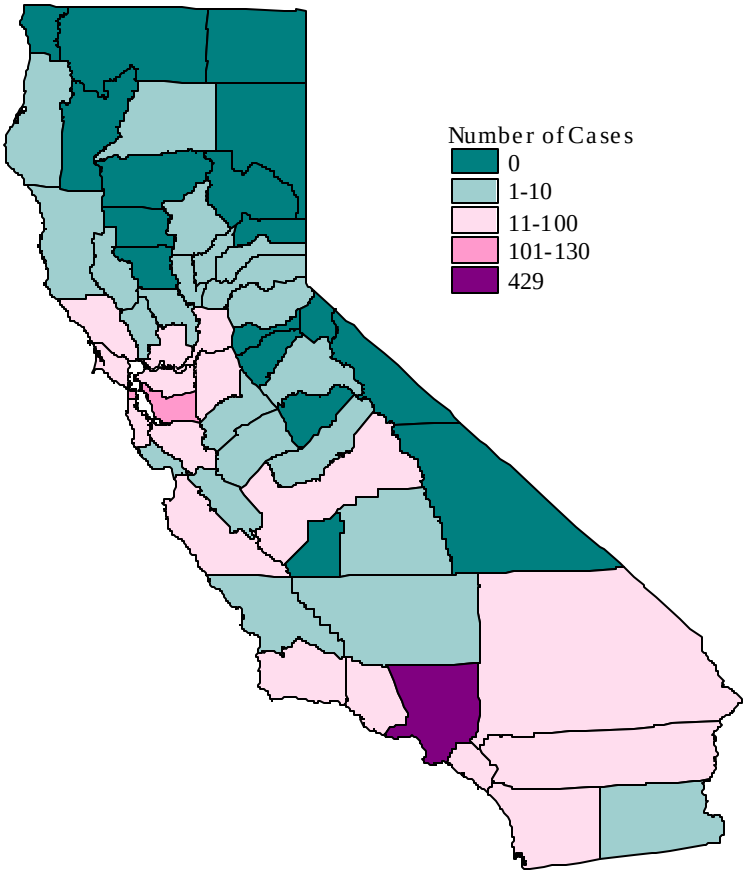
The top five counties with the highest 1988-1997 cumulative number of AIDS cases among women over age 45 were Los Angeles (429), San Francisco (130), Alameda (106), San Diego (95), and Orange (56) (Table 3.2). The 1988-1997 cumulative incidence rate per 100,000 population was the highest in San Francisco (96.6) and Alameda (51.7). Of the counties with the highest number of AIDS cases and incidence rate per 100,000 population, Alameda experienced a steady increase during the whole study period. Figure 3.2 presents the map of cumulative AIDS cases among women of ages 46 and over by county of residence at the onset of diagnosis.

Figure 3.2. Number of AIDS Cases and Incidence Rate Per 100,000 Population among Women Aged 46 and Over by County of Residence at Onset of Illness and Year of Diagnosis, California, 1988-1997.

County of Residence	YEAR										Total	Cum.
	88-89		90-91		92-93		94-95		96-97			
	Count	*Rate	Count	*Rate	Count	*Rate	Count	*Rate	Count	*Rate	Count	*Rate
ALAMEDA	9	4.9	15	7.9	24	12.0	26	12.4	32	14.5	106	51.7
BUTTE	2	6.1	0	0.0	0	0.0	3	7.8	3	7.7	8	21.6
CONTRA COSTA	3	2.5	4	3.1	14	10.2	14	9.5	10	6.5	45	31.7
EL DORADO	1	5.6	0	0.0	0	0.0	1	4.2	0	0.0	2	9.8
FRESNO	1	1.2	1	1.1	8	8.1	10	9.7	3	2.8	23	22.9
HUMBOLDT	0	0.0	0	0.0	1	5.3	1	5.0	2	9.6	4	19.9
IMPERIAL	1	7.2	0	0.0	0	0.0	1	5.7	0	0.0	2	12.9
KERN	1	1.5	1	1.4	1	1.3	2	2.4	4	4.6	9	11.2
LAKE	0	0.0	0	0.0	0	0.0	0	0.0	1	7.9	1	7.9
LOS ANGELES	51	4.2	76	6.1	96	7.5	111	8.4	95	7.0	429	33.2
MADERA	0	0.0	0	0.0	0	0.0	0	0.0	3	18.0	3	18.0
MARIN	3	7.5	2	4.8	3	7.1	5	11.7	1	2.3	14	33.5
MENDOCINO	0	0.0	0	0.0	1	7.0	0	0.0	0	0.0	1	7.0
MERCED	0	0.0	0	0.0	0	0.0	2	7.9	0	0.0	2	7.9
MONTEREY	1	2.3	2	4.3	4	8.2	1	2.0	6	11.8	14	28.5
NAPA	1	5.1	0	0.0	1	4.6	0	0.0	0	0.0	2	9.6
NEVADA	1	6.9	1	6.2	3	17.4	2	10.8	0	0.0	7	41.2
ORANGE	10	3.1	11	3.2	8	2.2	11	2.9	16	4.0	56	15.4
PLACER	0	0.0	0	0.0	1	3.2	1	2.9	0	0.0	2	6.1
RIVERSIDE	3	1.9	7	3.8	4	2.0	11	5.2	15	6.8	40	19.7
SACRAMENTO	3	2.1	4	2.6	14	8.6	9	5.3	7	3.9	37	22.4
SAN BENITO	0	0.0	1	20.5	1	18.8	0	0.0	0	0.0	2	39.3
SAN BERNARDINO	2	1.2	4	2.2	8	4.3	12	6.1	16	7.8	42	21.6
SAN DIEGO	13	3.9	18	5.1	13	3.5	32	8.5	19	5.0	95	26.0
SAN FRANCISCO	18	14.2	23	17.9	33	24.8	36	25.9	20	13.8	130	96.6
SAN JOAQUIN	1	1.5	3	4.3	4	5.5	1	1.3	11	13.8	20	26.5
SAN LUIS OBISPO	1	3.1	0	0.0	0	0.0	0	0.0	0	0.0	1	3.1
SAN MATEO	5	4.7	7	6.3	8	6.9	6	4.9	1	0.8	27	23.5
SANTA BARBARA	1	1.8	2	3.5	2	3.4	6	9.9	3	4.8	14	23.4
SANTA CLARA	9	4.5	6	2.9	13	5.9	11	4.7	17	6.9	56	24.9
SANTA CRUZ	1	3.2	0	0.0	2	5.8	0	0.0	2	5.1	5	14.0
SHASTA	1	4.2	1	3.8	1	3.6	0	0.0	1	3.3	4	14.9
SOLANO	6	15.8	5	11.8	1	2.2	2	4.1	3	5.8	17	39.7
SONOMA	1	1.7	1	1.6	3	4.4	3	4.1	4	5.2	12	16.9
STANISLAUS	2	4.1	0	0.0	4	7.0	3	5.0	0	0.0	9	16.0
SUTTER	0	0.0	0	0.0	0	0.0	0	0.0	3	23.7	3	23.7
TULARE	1	2.4	1	2.3	2	4.3	2	4.1	1	2.0	7	15.1
TUOLUMNE	1	11.7	0	0.0	0	0.0	0	0.0	0	0.0	1	11.7
VENTURA	2	2.3	5	5.3	3	3.0	4	3.8	2	1.8	16	16.2
YOLO	0	0.0	0	0.0	0	0.0	2	10.2	0	0.0	2	10.2
YUBA	1	13.1	0	0.0	0	0.0	0	0.0	0	0.0	1	13.1
Total	157	3.8	201	4.6	281	6.2	331	7.0	301	6.1	1271	27.7

Incidence rate for counties with number of cases less than ten may not be reliable.
Counties not listed had no AIDS cases in women of ages 46 and over during this time period.
Counts are adjusted for reporting delays.

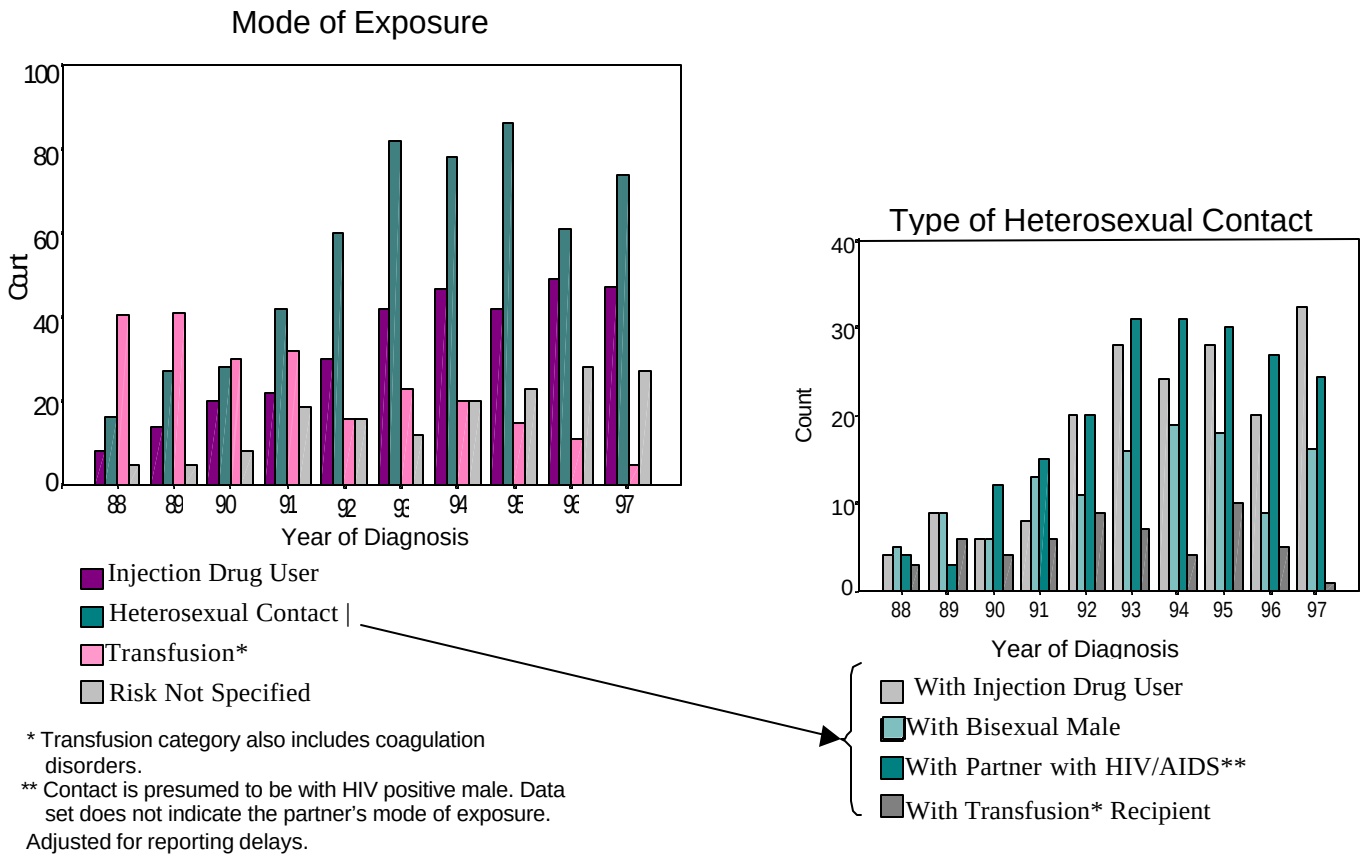
Figure 3.2. Cumulative Number of AIDS Cases among Women aged 46 and Over by County of Residence at Onset of Illness, California, 1988-97



Mode of Exposure to HIV

Figure 3.3 presents the distribution of women of ages 46 and over by mode of exposure. Although transfusion was the primary mode of exposure for women ages 46 and over in early years, heterosexual contact and injection drug use became the predominant modes of exposure in recent years. The number of injection drug users in 1997 increased almost six-fold compared to 1988. The number of women reporting heterosexual increased almost five-fold during the same period. There was an increase in the number of risk not reported or identified cases. A portion of these cases will be re-allocated to other modes of exposures over time based on the results of follow-up investigations. Among women reporting heterosexual contact an increasing number were those who had sexual contact with an injection drug user. Having sexual contact with a partner with HIV/AIDS (without the knowledge of partner's mode of exposure) was the other category with high incidence.

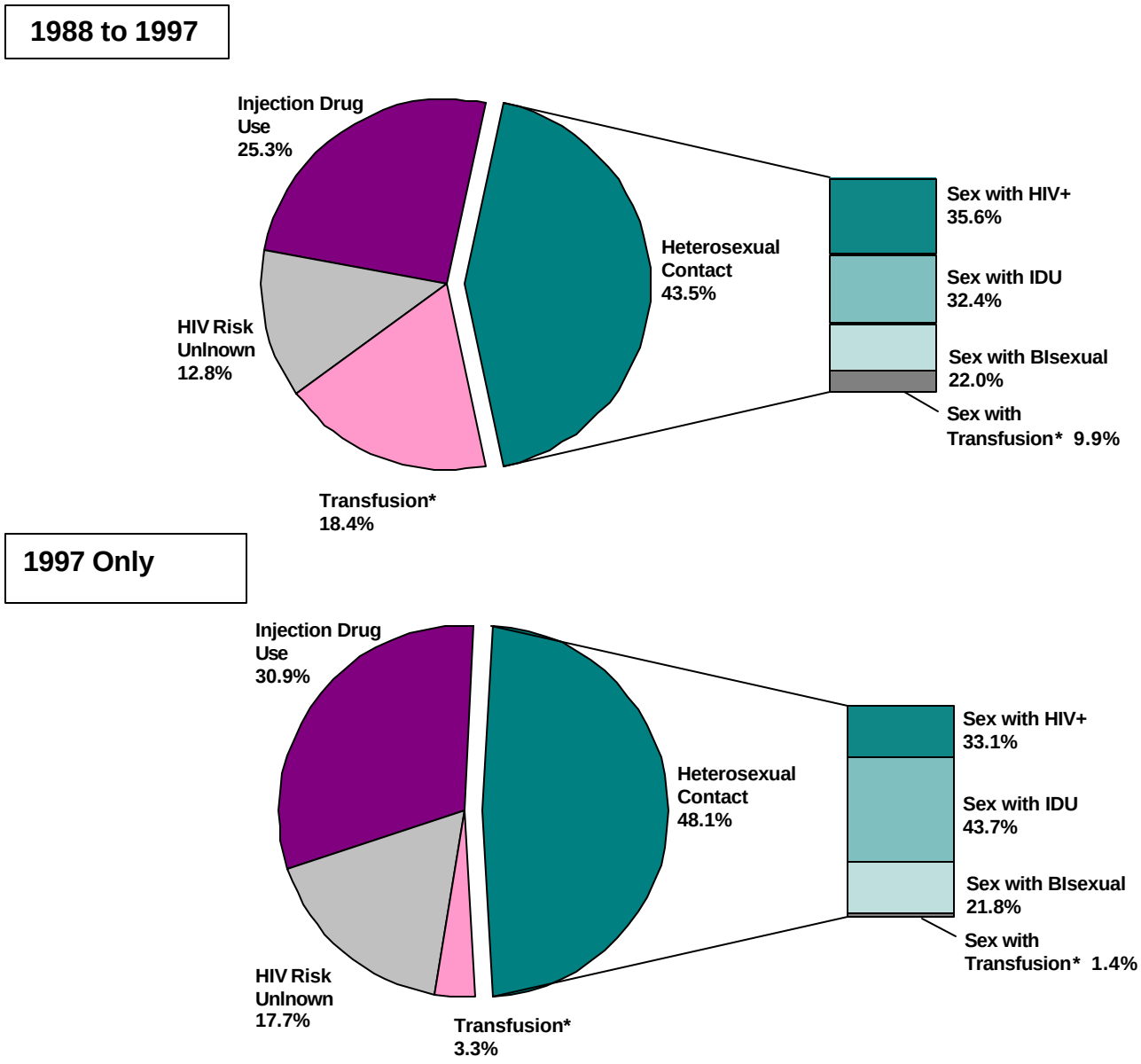
Figure 3.3. Mode of Exposure to HIV among Women Aged 46 and Over With AIDS In California, 1988-1997



* Transfusion category also includes coagulation disorders.
** Contact is presumed to be with HIV positive male. Data set does not indicate the partner's mode of exposure.
Adjusted for reporting delays.

The patterns of the distribution of AIDS cases among women of ages 46 and over in 1997 is different compared to the patterns of cumulative 1988-1997 (Figure 3.4). The noticeable differences are a significant reduction in the percentage of transfusion cases (from 18.4% to 3.3%), an increase in the percentage of heterosexual cases (from 43.5% to 48.1%), and an increase in the percentages of injection drug users (from 25.3% to 30.9%). In the heterosexual contact category, sexual contact with an injection drug user is the most predominant mode of exposure.

Figure 3.4. Mode of Exposure to HIV among Women Aged 46 and Over, California, Cumulative and 1997 Only



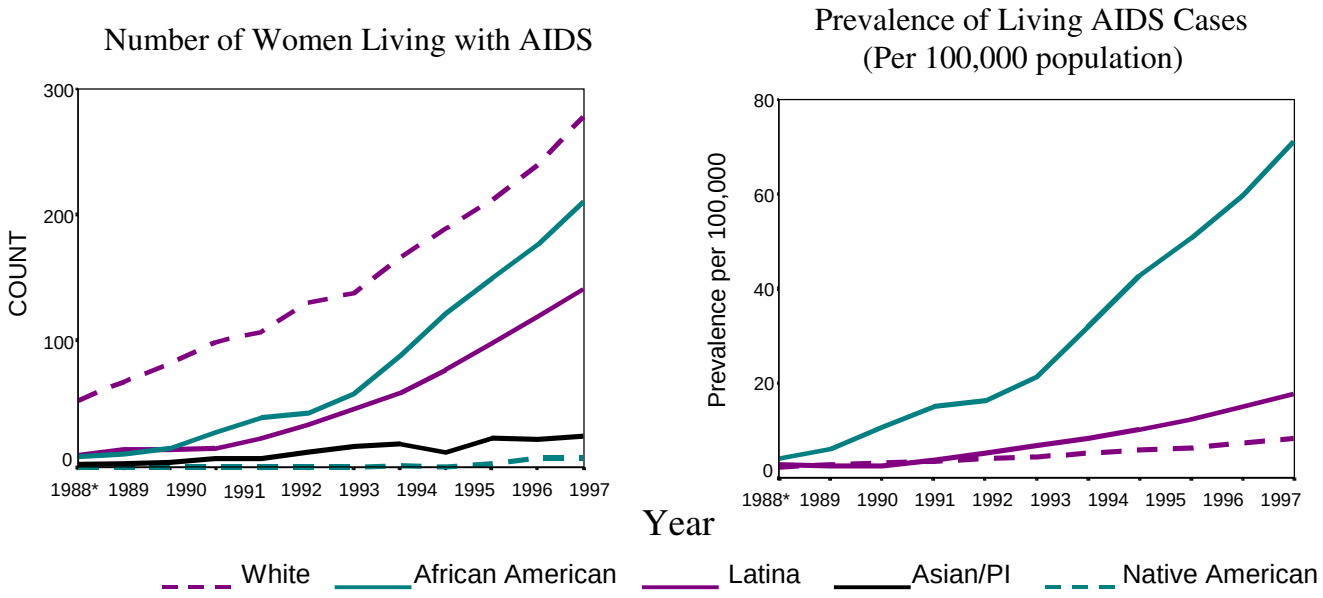
*Transfusion category also includes coagulation disorders.
Adjusted for reporting delays.

Living AIDS Cases among Women Ages 46 and Over

Table 3.3 presents the number of alive, cumulative and annual deaths, and cumulative mortality ratio of AIDS cases among women ages 46 and over by race/ethnicity and year in California. There was a steady increase in the number of living AIDS cases in this age group since 1992. The rate of increase since 1992 is stable with an exception of 1994 (38%) which may partly be due to the 1993 expansion of the AIDS case definition. The cumulative mortality ratio followed a moderately steady decline (from 79.8 to 56.9) during the study period.

The number of White women living with AIDS was the highest compared to all other races/ethnicities. The prevalence of AIDS among African Americans was much higher than the prevalence of AIDS among other racial/ethnic groups (Figure 3.5).

Figure 3.5. Number and Prevalence of Living Women of Aged 46 and Over with AIDS by Race/Ethnicity and Year of Diagnosis, California, 1988-1997



* These data include all women reported with AIDS prior to July 1, 1988, including those diagnosed prior to 1988.
Counts adjusted for reporting delays.
Prevalence rates were not reported for Asian/Pacific Islanders (Asian/PI) and Native Americans since the annual number of alive cases were predominantly less than ten.

Table 3.3. Number of Alive, Annual Deaths and Cumulative Deaths, and Mortality Rate among Women AIDS Cases Aged 46 and Over by Race/Ethnicity and Year, California, 1988-97.

		Alive Prior to 1/1	Cum. Deaths Prior to 1/1	Annual Deaths	CMR* per 100
1988	White	18	71	29	79.8
	African American	4	8	7	66.7
	Latina	6	9	11	60.0
	Asian/PI	2	1	1	33.3
	Native American	0	0	0	0.0
Total		30	89	48	74.8
1989	White	33	100	36	75.2
	African American	9	15	6	62.5
	Latina	6	20	11	76.9
	Asian/PI	3	2	2	40.0
	Native American	0	0	0	0.0
Total		51	137	55	72.9
1990	White	50	136	35	73.1
	African American	21	21	11	50.0
	Latina	7	31	9	81.6
	Asian/PI	5	4	3	44.4
	Native American	0	0	0	0.0
Total		183	192	58	69.8
1991	White	58	171	36	74.7
	African American	33	32	21	49.2
	Latina	15	40	10	72.7
	Asian/PI	5	7	4	58.3
	Native American	0	0	0	0.0
Total		111	250	71	69.3
1992	White	81	207	44	71.9
	African American	37	53	17	58.9
	Latina	26	50	18	65.8
	Asian/PI	11	11	3	50.0
	Native American	0	0	1	0.0
Total		155	321	83	67.4
1993	White	89	251	33	73.8
	African American	52	70	30	57.4
	Latina	38	68	17	64.2
	Asian/PI	15	14	4	48.3
	Native American	0	1	0	100.0
Total		194	404	84	67.6
1994	White	117	284	39	70.8
	African American	82	100	39	54.9
	Latina	51	85	11	62.5
	Asian/PI	17	18	7	51.4
	Native American	1	1	1	50.0
Total		268	488	97	64.6
1995	White	140	323	30	69.8
	African American	216	139	27	54.5
	Latina	69	96	21	58.2
	Asian/PI	11	25	2	69.4
	Native American	0	2	0	100.0
Total		336	585	80	63.5
1996	White	163	353	20	68.4
	African American	144	166	29	53.5
	Latina	90	117	18	56.5
	Asian/PI	22	27	4	55.1
	Native American	3	2	0	40.0
Total		422	665	71	61.2
1997	White	191	373	20	66.1
	African American	170	195	17	53.4
	Latina	111	135	15	54.9
	Asian/PI	21	31	3	59.6
	Native American	7	2	0	22.2
Total		500	736	55	59.5
1998	White	229	393	NA	63.2
	African American	205	212	NA	50.8
	Latina	133	150	NA	53.0
	Asian/PI	24	34	NA	58.6
	Native American	7	2	NA	22.2
Total		598	791	NA	56.9

*Cumulative Mortality
NA = Not applicable. Year 1998 was outside the study period.

Data from the California State-Funded HIV Testing Sites

From July 1, 1995 through June 30, 1997, California public testing programs provided 43,583 HIV tests to this population of women throughout the state. As in the previous HIV Counseling and Testing section, all analyses were conducted separating first-time and repeat clients. Any meaningful differences among clients will be noted.

Table 3.4 shows the number of HIV positive versus HIV negative women 46 years of age and over with respect to first-time and repeat testers. The total number of women in our sample was 43,583, of which 638 were HIV infected. The overall HIV infection rate was 1.5 %. First-time testers had a slightly higher percentage of HIV infections compared to repeat testers (1.8% vs. 1.3%).

Table 3.4. Comparison of HIV Test Result among Women 46 years of age and Over, First-Time and Repeat Testers, California, July 1995-June 1997.

	Type of Tester					
	Positive		Negative		Total	
Type of Tester	No.	%	No.	%	No.	%
First-Time	262	1.8	14,705	98.2	14,967	100
Repeat	376	1.3	28,240	98.7	28,616	100
Total	638	1.5	42,945	98.5	43,583	100

Demographic Variables Associated with HIV Infection

Table 3.5 illustrates the distribution of HIV infected women by age groups. A larger number and percentage of women 46 to 49 years of age were HIV infected compared to other age groups (50% vs. 40% and 10%, respectively).

Table 3.5. Distribution of HIV Infection by Age among Women 46 years of age and Over.

Age Group							
46-49 Years Old		50-59 Years Old		60 Years and Over		**Total**	
No.	%	No.	%	No.	%	No.	%
317	50	254	40	68	10	638	100

Figure 3.6 shows the relative frequencies of HIV infected women 46 years of age and over by race/ethnicity among first-time and repeat testers. White women had the highest number and percentage of HIV infection compared to other race/ethnicity groups.

Figure 3.6. Distribution of HIV Infection by Race/Ethnicity among Women 46 years of age and Over, First-Time and Repeat Testers

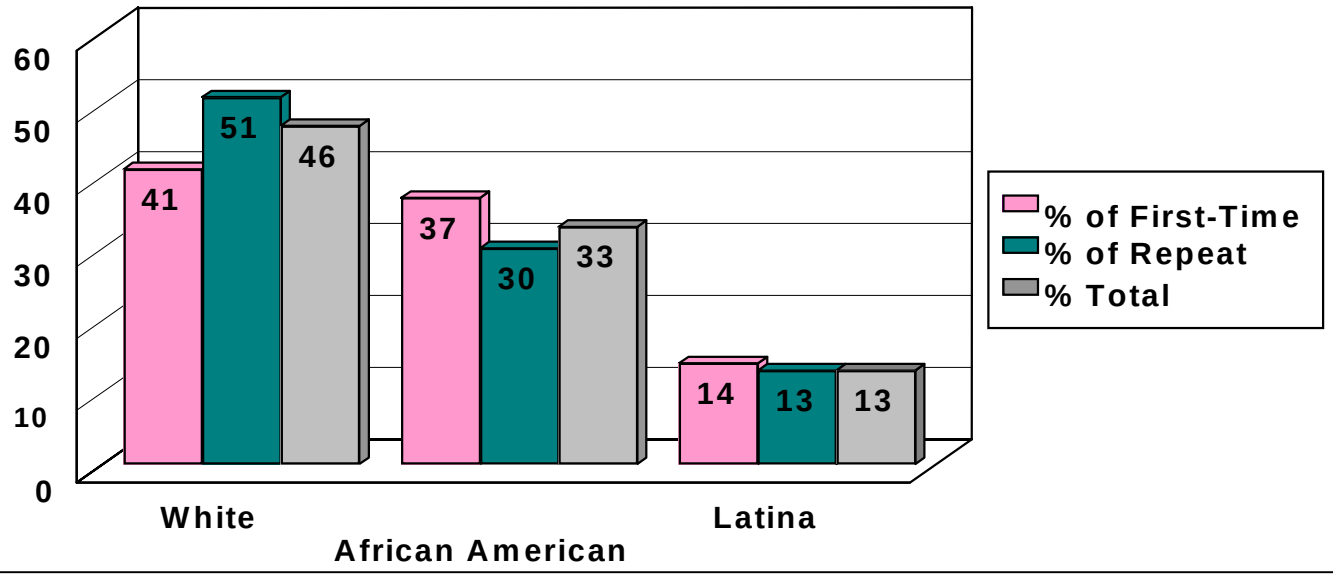


Figure 3.7 illustrates that the majority of HIV infected women used alternative test sites (44%) and other health department clinics (24%) to test for HIV. Repeat clients were much more common in detention facilities, sexually transmitted disease clinics (although the numbers were small), and in alternative test sites.

Figure 3.7. Distribution of HIV Infected Women by Testing Clinic/Site Type

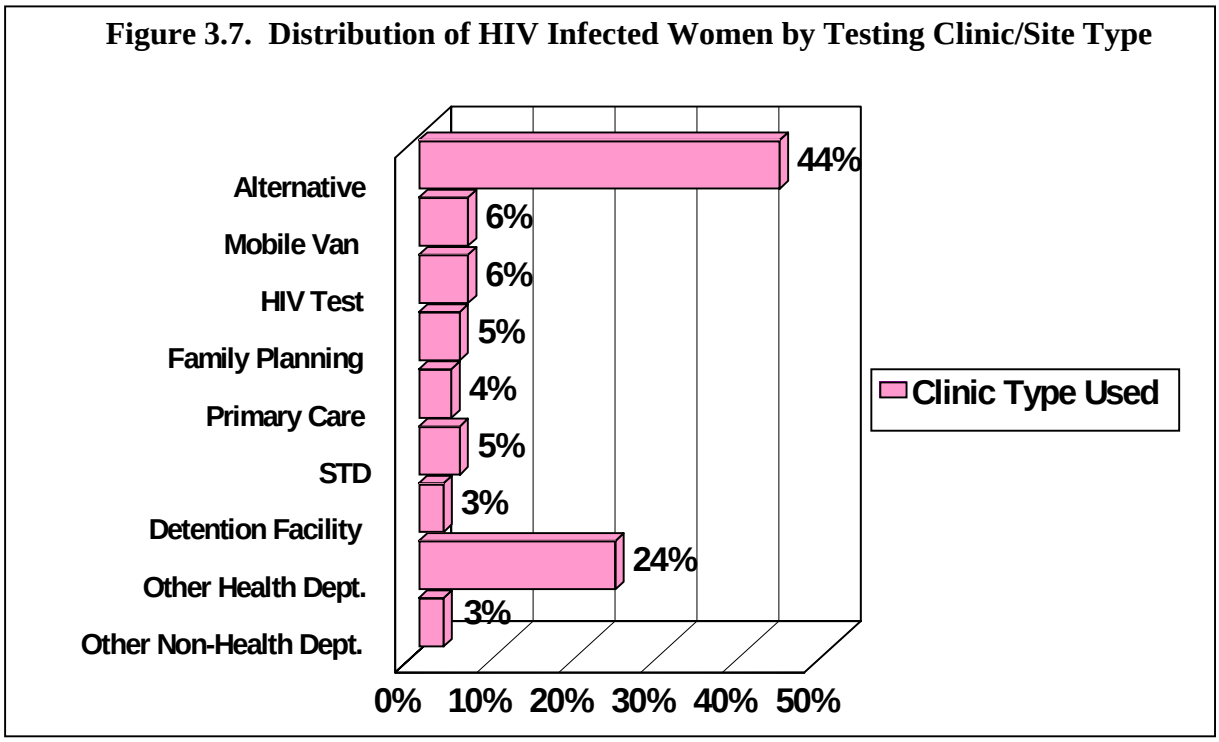


Table 3.6. Distribution of HIV Infected Women 46 years of age and Over, in California, July 1995-June 1997, by County of Residence.

County of Residence	No. HIV Infected	% of HIV Infected
Alameda	92	18
Berkeley	1	0
Butte	1	0
Contra Costa	11	3
Fresno	26	6
Humboldt	1	0
Imperial	1	0
Kern	6	1
Lake	1	0
Lassen	1	0
Los Angeles	108	21
Madera	1	0
Marin	3	0
Mendocino	6	1
Merced	1	0
Monterey	2	0
Orange	27	6
Placer	1	0
Riverside	24	6
Sacramento	18	4
San Bernardino	11	3
San Diego	42	8
San Francisco	80	16
San Joaquin	6	1
San Luis Obispo	3	0
San Mateo	6	1
Santa Barbara	6	1
Santa Clara	7	1
Santa Cruz	1	0
Shasta	2	0
Siskiyou	1	0
Solano	1	0
Sonoma	13	3
Stanislaus	3	0
Sutter	2	0
Tehama	1	0
Tulare	3	0
Ventura	4	0
Total (N=43,469)	524	100%

Table 3.6 summarizes the number and percentage of HIV infected women by county of residence. Urban counties such as Los Angeles (21%), Alameda (18%), and San Francisco (16%) constitute the highest number of HIV positives compared to other counties.

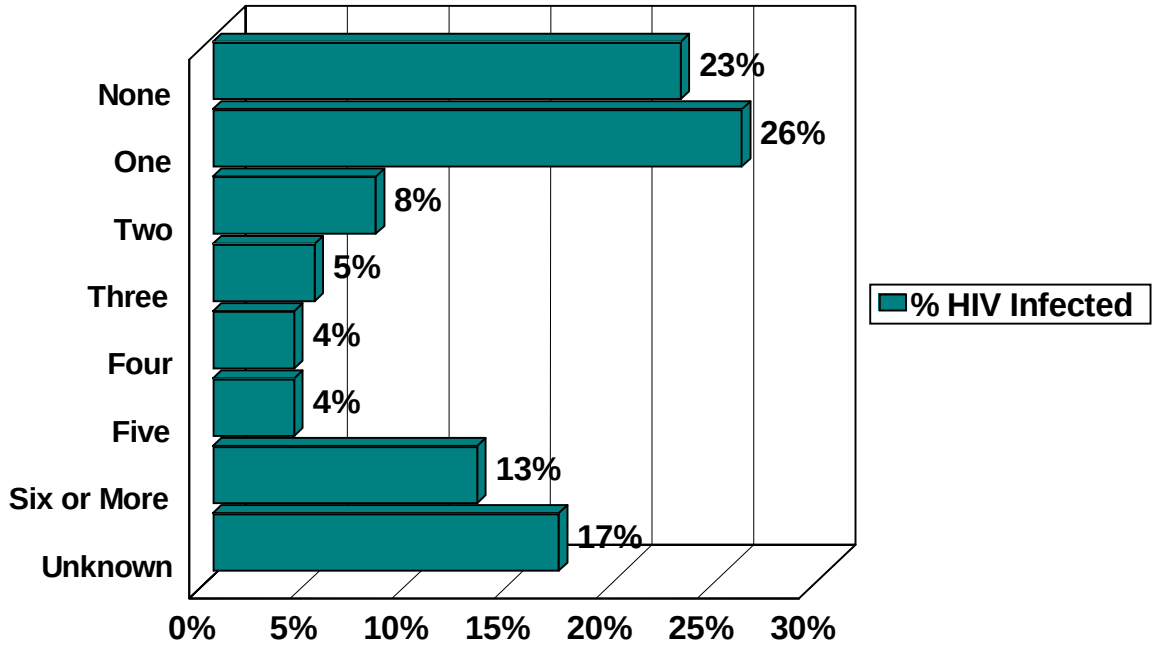
Note on table 3.6: The following local health jurisdictions were omitted because there were no HIV infected women of childbearing age during the study period: Alpine, Amador, Calaveras, Colusa, Del Norte, El Dorado, Glenn, Inyo, Long Beach, Mariposa, Modoc, Mono, Napa, Nevada, Pasadena, Plumas,

San Benito, Sierra, Sutter, Trinity, Tuolumne, Yolo, and Yuba. Sixty-five first-time and 49 repeat tester cases were not reported due to missing data.

Behavioral Variables Associated with HIV Infection

Figure 3.8 shows the number of partners HIV infected women reported having intercourse within the last 12 months. Twenty three percent of HIV infected women reported having no sexual partner in the last year. 26% of HIV infected women reported one sexual partner in the last year. The proportion of women with six or more partners was higher among repeat testers compared to first-time testers.

Figure 3.8. Distribution of HIV Infection by Number of Women's Sex Partners in the Last 12 Months



A separate analysis of history of sexually transmitted disease among HIV infected first-time and repeat testers revealed no meaningful differences between these groups of women.

Table 3.7 summarizes non-injection drugs used by HIV infected women. Repeat testers reported a higher percentage of all non-injection drug use than first-time testers, especially with respect to other (unknown) drugs. The high risk drugs of cocaine, crack, and crank were used by very high percentages of these older women.

Table 3.7. Distribution of First-Time and Repeat Testing Women Aged 46 Years or Over who used Non-Injection Drugs, California, July 1995-June 1997.

Type of Tester	Alcohol		Marijuana		Cocaine		Crack		Crank		Other (Unknown) Drugs	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
First-Time	68	37	37	38	28	44	17	38	13	33	13	29
Repeat	118	63	60	62	35	56	28	62	26	67	32	71
Total	186	39	97	20	63	13	45	10	39	8	45	10

Note on table 3.7: Column totals are not reported because it is possible that a single client reported multiple non-injection drug use.

Table 3.8 profiles HIV infected women by risk. Injection drug use was by far the most highly associated with HIV infection. Repeat testers reported a higher percentage of injection drug use compared to first-time testers (17% vs. 7%).

Table 3.8. Distribution of HIV Infection by Risk among First Time and Repeat Testing Women Aged 46 and Over, California, July 1995-June 1997.

Risk Category	No. HIV Infected	% HIV Infected
Injection drug Use	76	24
Partner of HIV+	36	12
Partner of Bisexual	3	1
Partner of IDU	10	3
Sex for Drugs/Money	26	8
Transfusion	7	2
Hereto./Multi. Partners	20	7
Partner of Multi. Partners	30	10
Occupational	3	1
No Reported Risk	31	10
Unknown	67	22
Total (N=43,386)	309	100

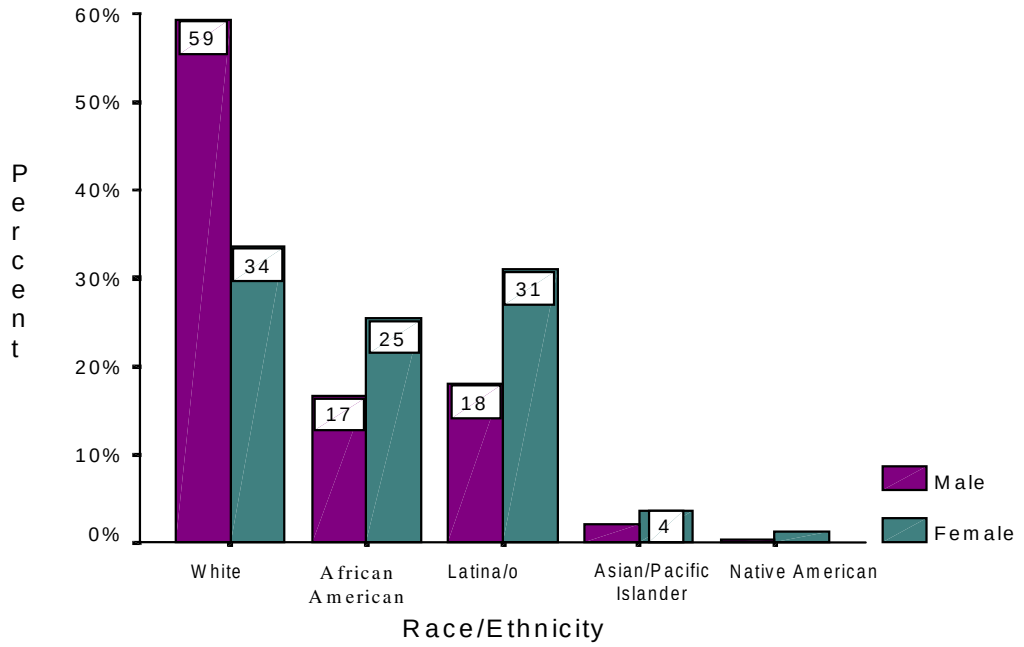
Note on table 3.8: A woman having at least two partners defined multiple partners. Risk categories not listed had no HIV positive cases reported from first-time and repeat testers. One hundred and twenty four first-time and 205 repeat tester cases were not reported due to missing data.

Data from the AIDS Drug Assistance Program

Women aged 46 and over accounted for 17% of all female ADAP clients served in 1996 and 1997. While 61% of women over 45 received services in Los Angeles County in 1996, this proportion dropped to 46% in 1997. The San Francisco Bay Area, however, showed an increase in the proportion of women over 45 receiving ADAP services statewide. The percentage of women receiving services in San Francisco and Alameda increased from 3.7 and 1.7 in 1996 to 6.6 and 6.9 in 1997, respectively.

The gender comparison of the racial/ethnic distribution of 46 year old and over ADAP clients served in 1996 and 1997 revealed that minority women are disproportionately over-represented compared to males (Figure 3.9). Female Whites, Latinas, African Americans, Asian/Pacific Islanders, and Native American/Indians accounted for 34%, 31%, 25%, 4 % and 1% of women over 45, respectively. Whites accounted for the largest racial/ethnic group regardless of gender.

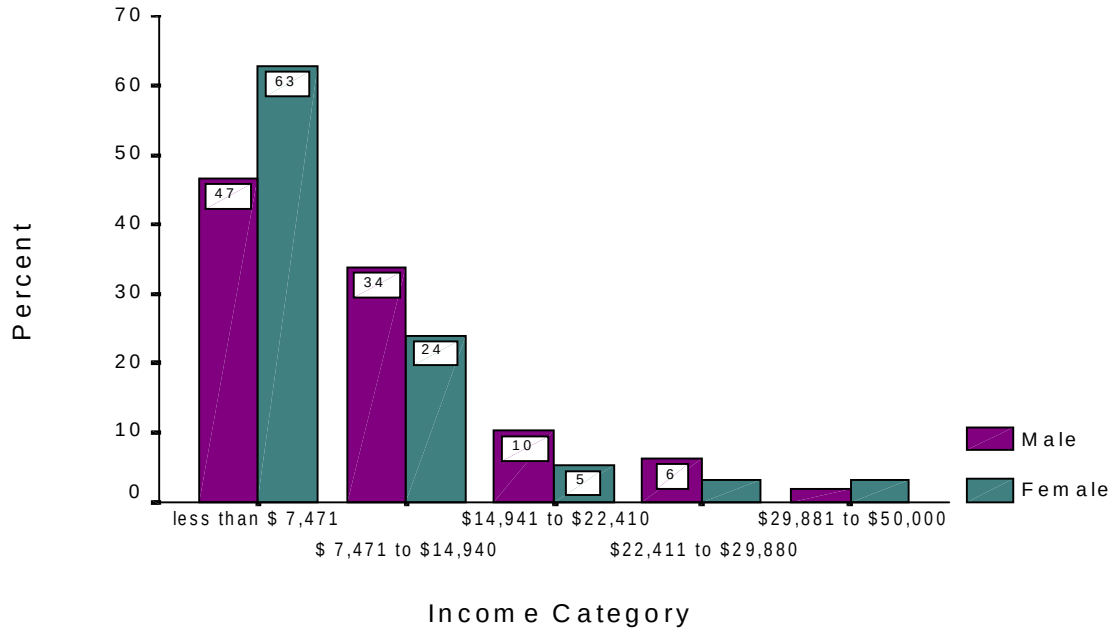
Figure 3.9. Comparison of Racial/Ethnic Distribution of the 46 and Over Age Group ADAP Clients by Gender, California, 1996-97



Among clients over 45 served in 1996 and 1997, females had lower annual income than males (Figure 3.10). The median income for females was $4,844 compared to $6,403 for males. Nearly two thirds of women over 45 had annual incomes less than $7471 or less than 100% of

the 1996 federal poverty level. A third of all women in this age group served in 1996 and 1997 earned between $7,470 and $29,880. Only 3.2% had annual incomes between $29,880 and $50,000.

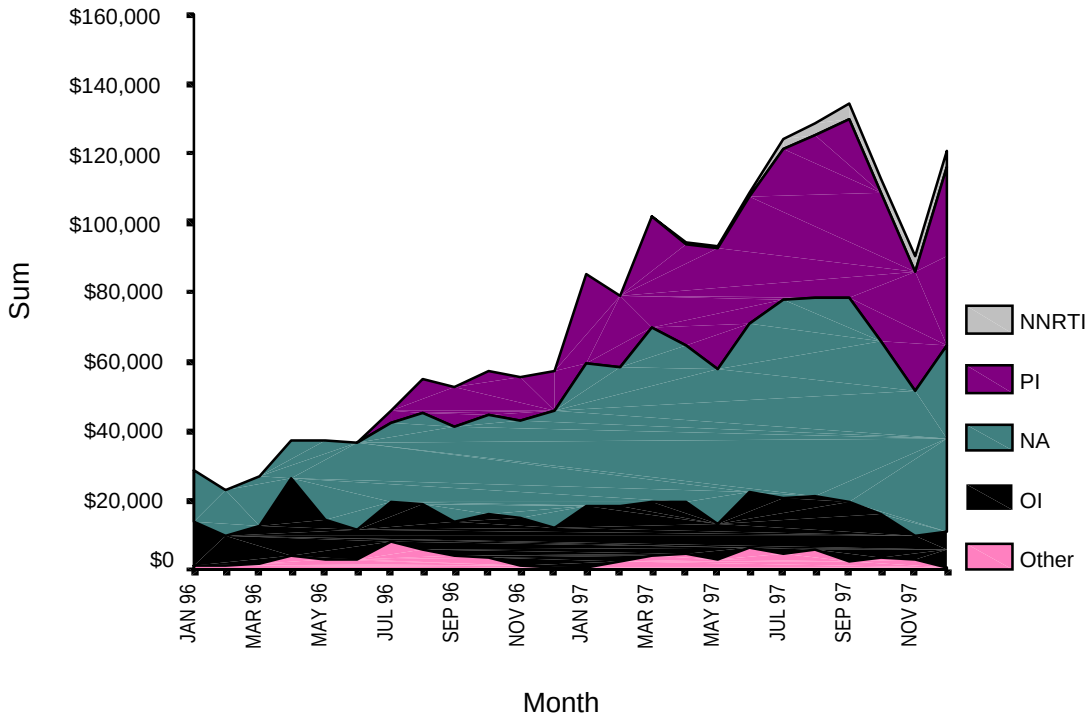
Figure 3.10. Comparison of Client Annual Income Distribution for ADAP Clients Aged 46 and Over Served in 1996 & 1997 by Gender



About 64% of female ADAP clients over 45 years of age were determined to rely solely on the program to pay their prescription costs while 17% rely on ADAP to subsidize some of their prescription costs. ADAP was not able to determine if a client relied solely on ADAP or had a third party payor to cover prescription costs for 19% of the female clients over 45 years of age.

Increasing expenditures for protease inhibitors (PIs) shortly after their inclusion in the ADAP formulary was observed (Figure3.11). In 1996, ADAP antiretroviral drug expenditures for women aged 46 and over totaled $0.33 million. Total antiretroviral expenditures grew to $1.06 million in 1997. This growth can be attributed to the increasing utilization of PIs. Expenditures for drugs indicated for the treatment of opportunistic infections slightly increased from $0.15 million in 1996 to $0.17 million in 1997. Expenditures for other drugs remained constant at $0.04 million annually.

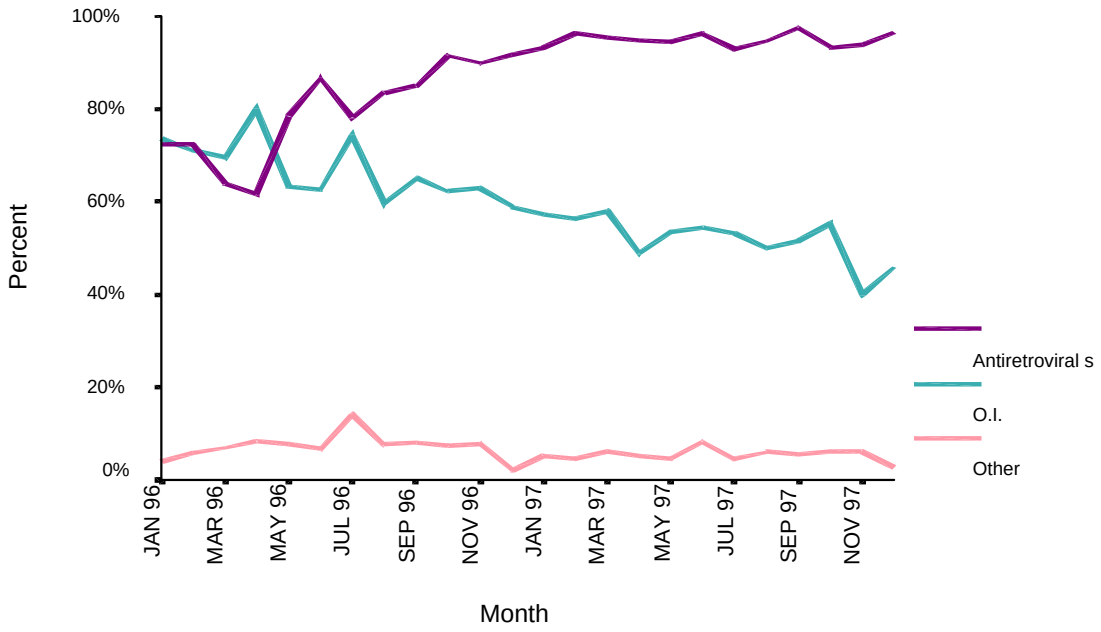
Figure 3.11. Monthly Drug Expenditures for Female ADAP Clients Ages 46 and Over Served in California, 1996-97



Protease inhibitors (PIs) were added to the formulary in April 1996 while non-nucleoside reverse transcriptase inhibitors (NNRTIs) were added in April 1997. Nucleoside analogues (NAs), drugs for the treatment of opportunistic infections (O.I. drugs) and ancillary drugs (other) were on the formulary prior to 1996.

The increase in popularity of antiretroviral therapy was apparent in the drug utilization patterns among women ages 46 and over (Figure 3.12). In early 1996, only 72% of women were receiving antiretroviral medications. By late 1997, 97% were on antiretroviral therapy. The proportion of clients receiving drugs for the treatment of opportunistic infections has steadily declined from 74% in early 1996 to 46% by late 1997. The proportion of clients on drugs for ancillary HIV therapy has remained steady at about 4%.

Figure 3.12. Monthly Proportion of Female ADAP Clients Ages 46 and Over on Various Treatment Regimens, California, 1996-97



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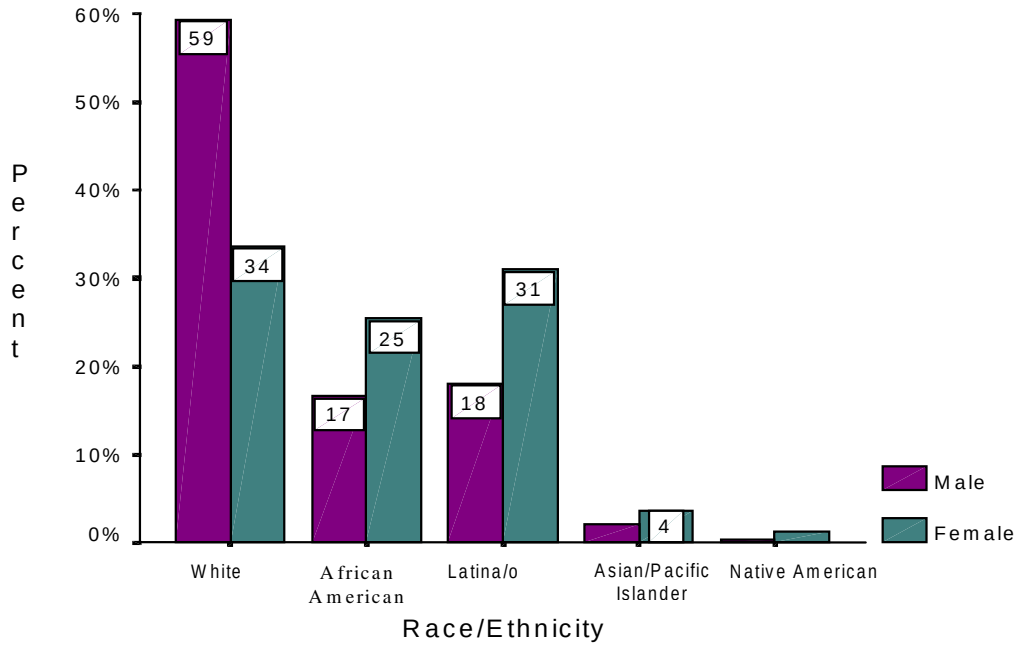

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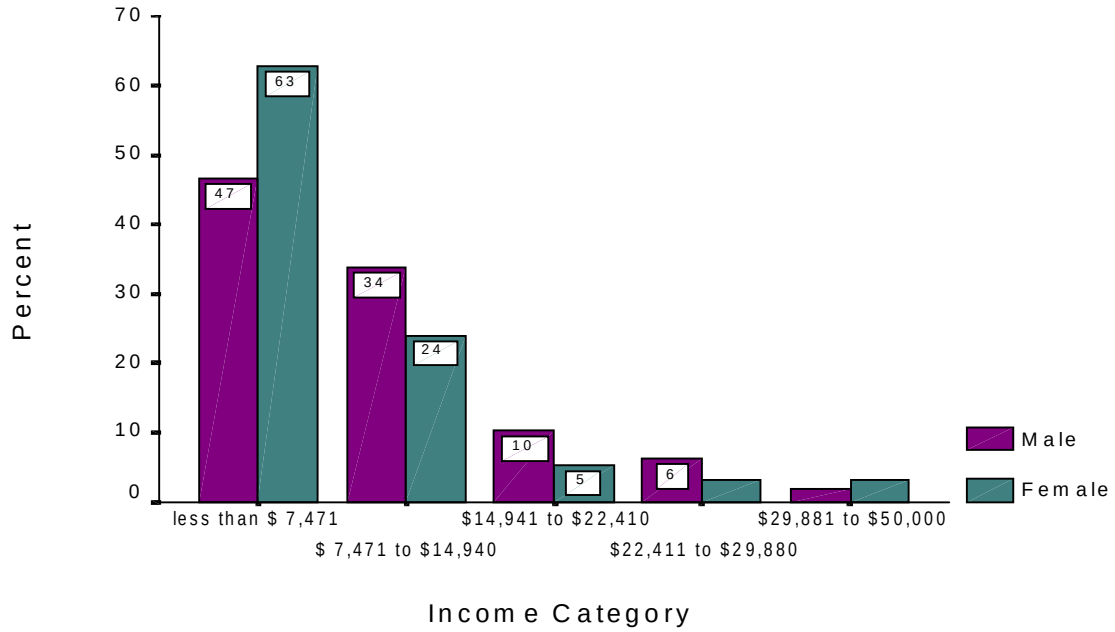
Figure 3.10. Comparison of Client Annual Income Distribution for ADAP Clients Aged 46 and Over Served in 1996 & 1997 by Gender



About 64% of female ADAP clients over 45 years of age were determined to rely solely on the program to pay their prescription costs while 17% rely on ADAP to subsidize some of their prescription costs. ADAP was not able to determine if a client relied solely on ADAP or had a third party payor to cover prescription costs for 19% of the female clients over 45 years of age.

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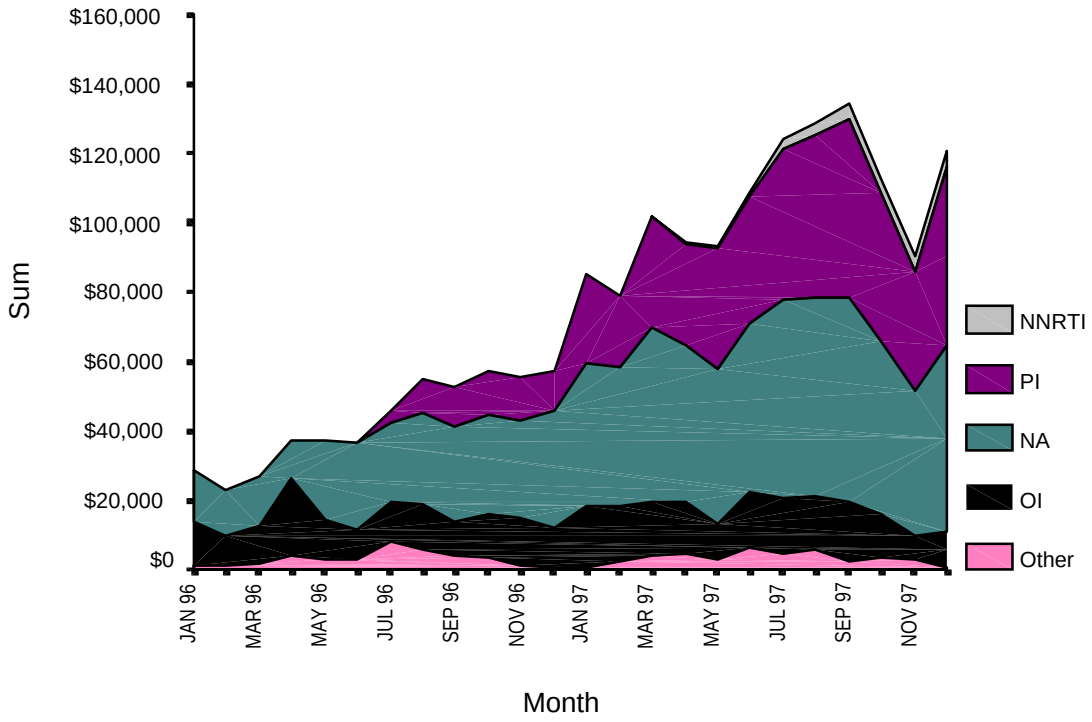
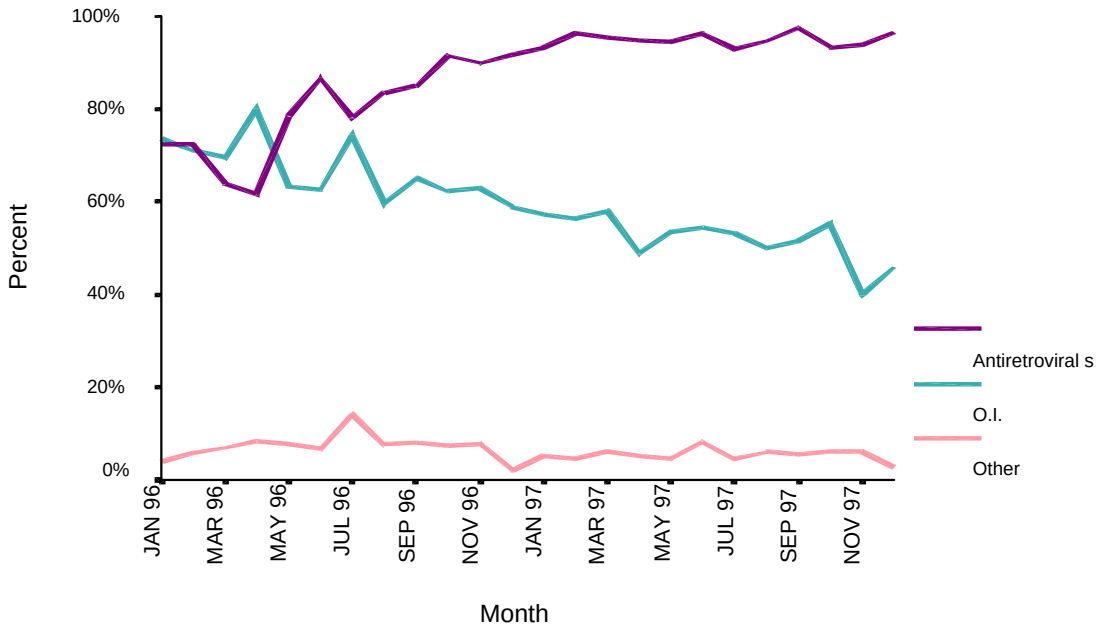
Figure 3.11. Monthly Drug Expenditures for Female ADAP Clients Ages 46 and Over Served in California, 1996-97



Protease inhibitors (PIs) were added to the formulary in April 1996 while non-nucleoside reverse transcriptase inhibitors (NNRTIs) were added in April 1997. Nucleoside analogues (NAs), drugs for the treatment of opportunistic infections (O.I. drugs) and ancillary drugs (other) were on the formulary prior to 1996.

The increase in popularity of antiretroviral therapy was apparent in the drug utilization patterns among women ages 46 and over (Figure 3.12). In early 1996, only 72% of women were receiving antiretroviral medications. By late 1997, 97% were on antiretroviral therapy. The proportion of clients receiving drugs for the treatment of opportunistic infections has steadily declined from 74% in early 1996 to 46% by late 1997. The proportion of clients on drugs for ancillary HIV therapy has remained steady at about 4%.

Figure 3.12. Monthly Proportion of Female ADAP Clients Ages 46 and Over on Various Treatment Regimens, California, 1996-97



Data from the Case Management Program

Of the 3612 clients served by the Case Management Program from January 1, 1996 to December 31, 1997 there were 105 women who were diagnosed with either HIV or AIDS at age 46 and older. The ethnic distribution among these female clients diagnosed in later years is similar to the ethnic distribution of women who were diagnosed between ages 13 and 45 (Figure 3.13). The proportion of African American women who were diagnosed at age 46 or later was higher than the proportion of African American among all 3612 clients (31.2% vs.16.9%). The proportion of White female clients diagnosed in later years is lower than the proportion of White women among all 3612 clients (42.9% vs. 57.3%).

Age at Enrollment

The mean age at enrollment (Figure 3.14) was oldest for White women and youngest for Native American women. There were 41 women enrolled between age 46 and age 55, which accounts for 52.6% of the women diagnosed at age 46 or later. The mean time from diagnosis to enrollment was 2.6 years, with a minimum of less than one year and a maximum of 11 years.

Income

There were 48 out of the 78 women (62%) who reported having an income that fell below 300% of Federal Poverty Income Guidelines, compared with 52% of men in the same age group. The ethnic distribution of the women falling in this income bracket is similar to the ethnic distribution of all clients who reported income below 300% of the Federal Poverty Income Guidelines (Figure 3.15.)

Figure 3.13. Women Aged 46 and Older at Diagnosis Served in the AIDS Case Management Program, by Race/Ethnicity, 1996 - 1997

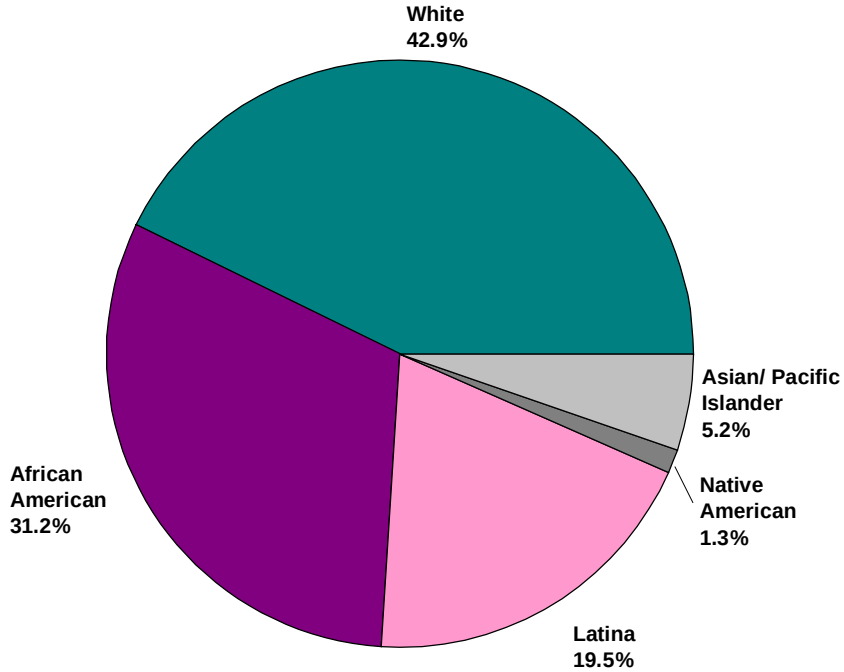
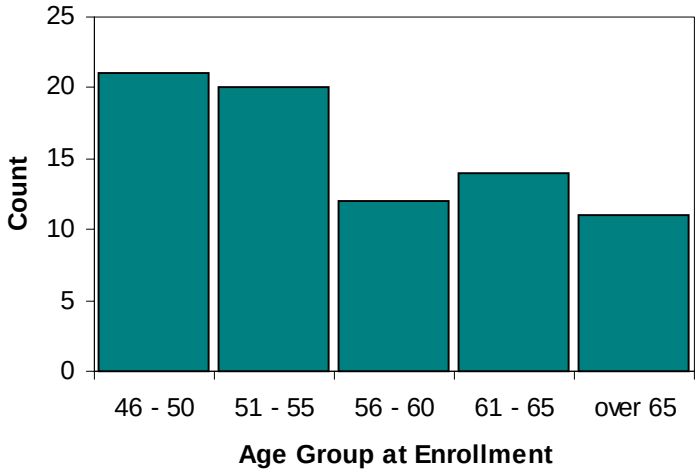
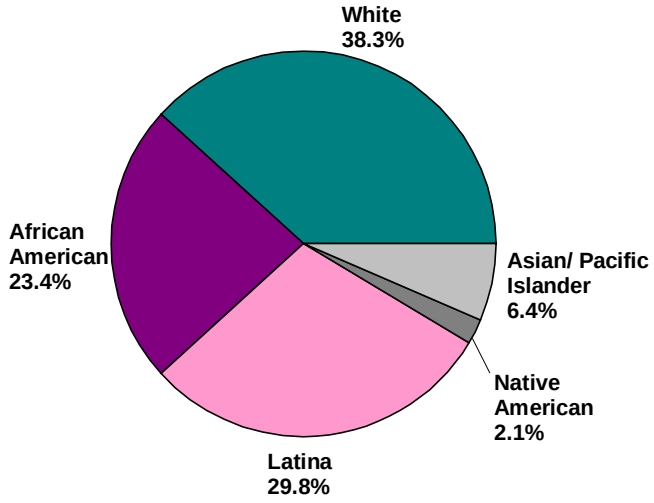


Figure 3.14. Age at Enrollment into the CMP of Women Diagnosed at Age 46 Or Older, 1996 - 1997



Race/Ethnicity	Mean Age
White	60.3
African American	54.9
Latina	57.0
Asian/PI	56.5
Native American	53.0
unknown	51.0
Total	57.6

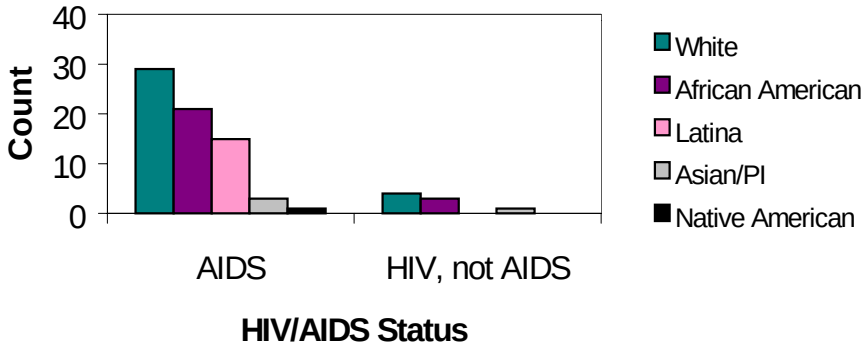
Figure 3.15. Women with Income Below 300% of Federal Poverty Income Guidelines Diagnosed at Age 46 or Older Served by the CMP, by Race/Ethnicity, 1996-1997



HIV/AIDS Status

The Case Management Program primarily serves clients in the later stages of the disease, which is evidenced by 89.7% of the clients in this group having a diagnosis of AIDS and only 10.3% having been diagnosed with HIV but not AIDS. The ethnic distribution (Figure 3.16) is similar to that of women diagnosed in childbearing years.

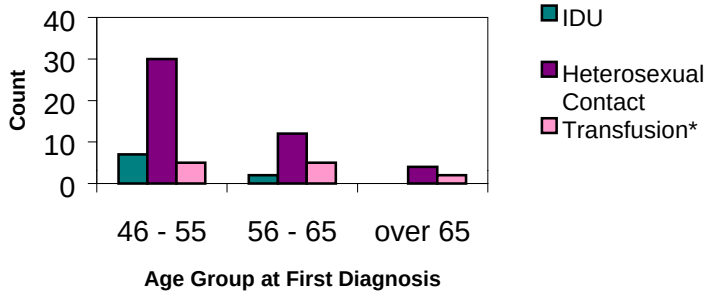
Figure 3.16. HIV/AIDS Status of Women Diagnosed At Age 46 or Older Served by the CMP, by Race/Ethnicity, 1996 - 1997



Mode of Exposure

In the Case Management data a woman may be reported in more than one exposure category. For example, if a woman reports both injection drug use and heterosexual contact as possible modes of exposure, she would be listed under both modes. Heterosexual contact with a person who has or is at increased risk for HIV was the most commonly reported mode of exposure with 46 out of 78 women (59%) diagnosed at ages 46 and over reporting this type of exposure. There were 9 women who reported injection drug use as a mode of exposure (12%) and 24 women (31%) with blood disorder, transfusion, tissue or perinatal exposure. Additional age breakdowns are given in Figure 3.17. Heterosexual contact was the most frequently reported mode of exposure in the three age categories: women who were between 46 an 55, women between 55 and 65 and women age 66 or older when first diagnosed. Figure 3.18 shows the ethnic breakdown of the women who reported they had: A) been an injection drug user (IDU), B) had heterosexual contact with a person with or at increased risk for HIV and C) had hemophilia or coagulation disorder, blood

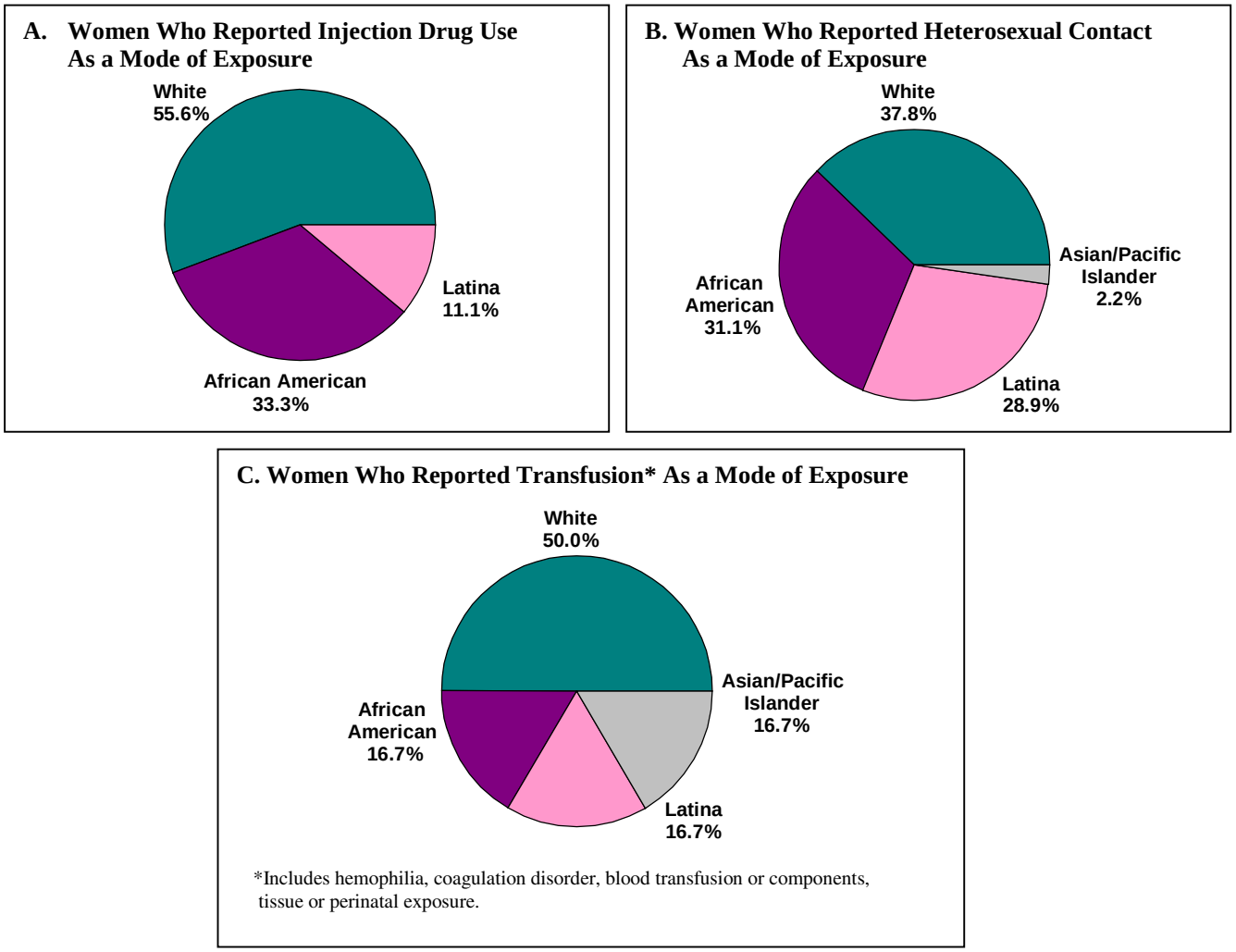
Figure 3.17. Modes of Exposure Reported by Women Served by the CMP by Age at Diagnosis, 1996 - 1997



* Includes hemophillia, coagulation disorder, or blood transfusion

transfusion or components, or tissue or perinatal exposure. A woman may be in any or all three groups, or in none of them if her exposure was other or unknown.

Figure 3.18. Modes of Exposure Reported by Women Diagnosed at Age 46 or Older



Service Usage

To assure clients receive appropriate care, the case management team advocates for the provision of many types of service. Summaries for selected services are given in Tables 3.9 –3.11. The selected services are:

Table 3.9. Health Care Service Usage by Women Diagnosed at Age 46 or Older Served by the CMP, 1996 – 1997.

	Number Using Service, 1996-1997		Number of Office-Based Visits By Clients Using Service			Total Visits for
Service	Count	(%)	Min.	Max.	Median	1996-1997
Medical	72	(92.3)	1	80	11	1222
Dental	24	(30.8)	1	18	3	117
Substance Abuse	5	(06.4)	2	120	27	196
Mental Health	26	(33.3)	1	82	7	373
Rehabilitation	12	(15.4)	1	27	3	94

Table 3.10. Direct Care Service Usage by Women Diagnosed at Age 46 or Older Served by the CMP, 1996 – 1997.

	Number Using Service, 1996-1997		Number of Hours Reported For Clients Using Service			Total Hours for
Service	Count	(%)	Min.	Max.	Median	1996-1997
Attendant	41	(52.6)	2	1152	189	12100
Homemaker	21	(26.9)	2	1754	80	7112
Skilled Nursing	23	(29.5)	2	409	11	830
Specialized Care	15	(19.2)	2	61	4	168
Practical Care	29	(37.2)	2	162	12	739
Emotional Care	31	(39.7)	1	93	12	649

Table 3.11. Financial Assistance Provided to Women Diagnosed at Age 46 or Older Served by the CMP, 1996 - 1997

	Number Provided Assistance, 1996-1997		Amount Provided to Clients Using Assistance			Total $$
Type of Assistance	Count	(%)	Min.	Max.	Median	For 1996-1997
Transportation	23	(29.5)	$ 13	$ 920	$ 45	$ 3,844
Housing	12	(15.4)	$ 100	$ 9,200	$1,227	$ 23,188
Food	35	(44.9)	$ 6	$ 3,720	$ 260	$ 22,576
Other Financial	23	(29.5)	$ 9	$ 8,980	$ 210	$ 16,056

Disenrollment and Death

There were 18 deaths reported between January 1, 1996 and December 31, 1997 among women in the CMP who were diagnosed at age 46 or older. During this same time period, 35 of these women were disenrolled for reasons other than death. One of the primary reasons for disenrollment was transfer to the AIDS Medi-Cal Waiver Program, which accounted for 10 disenrollments, or 12.8% of the disenrollments not due to death. Another 12.8% was due to other unspecified reasons.

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Appendix

Case Management Program Services

Health Care Services	Medical	Number of office-based medical care visits, emergency room visits, and specialized health care visits.
	Dental	Number of office-based diagnostic and therapeutic visits by a dentist, dental hygienist, etc.
	Substance Abuse	Number of office-based treatment or counseling sessions to treat substance abuse, drugs/alcohol.
	Mental Health	Number of office based mental health therapy or counseling visits, individual or group therapy provided by a licensed mental health therapist. E.g., M.D., Ph.D., L.C.S.W., M.F.C.C.
	Rehabilitation	Number of office-based visits for the following types of therapy: physical, speech, vision, occupation, etc., provided by a licensed therapist.
Direct Care Services	Attendant	Hours of attendant care/home health aide provided by a certified nurses aide or home health aide.
	Homemaker	Hours of homemaker chores provided.
	Skilled Nursing	Hours of in-home skilled nursing care provided by a licensed R.N. or L.V.N.
	Specialized Care	Home visits for specialized care services, i.e., intravenous and aerosolized treatment, parenteral feeding, diagnostic testing, and high-tech therapy.
	Practical Care	Hours of practical support provided by trained volunteers/peers assisting the client in day to day living.
	Emotional Care	Hours of emotional support provided by trained volunteers/peers assisting the client with their emotional needs.
Living Assistance	Transportation Costs	Cost of transportation provided to access care/services.
	Housing Costs	Cost of rental or other housing subsidy.
	Food Costs	Costs associated for food, food bank or home delivered meals.
	Financial Assistance	Other money received, for costs other than those listed above, for short term direct financial assistance for food vouchers, utilities or medications when other resources are not available.